

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of:)	
)	
Implementation of the Local Competition Provisions in the Telecommunications Act) of 1996)	CC Docket No. 96-98
)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers)	CC Docket No. 95-185
)	

REPLY COMMENTS OF MCI WORLDCOM, INC.

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EXECUTIVE SUMMARY

The initial comments and accompanying factual material provide compelling support for a Commission rule that requires unbundled access, on a nationwide basis, to each of the core network elements identified in the First Report and Order, whether used for voice or advanced services. Apart from the ILECs themselves, whose comments demonstrate nearly uniform hostility to any rule that would require them to open their networks to competition, virtually all of the commenters point in the same direction: Analysis of the purposes of the Act and local telephone markets today should lead the Commission to a construction of the Necessary and Impair standards that would require the unbundling of the core components of the local telephone network. Unbundling is critical because competitors need to share in overwhelming economies of scale, density, and connectivity that exist in the local telephone networks if they are to be able to offer competition to the ILECs for all classes of customers in all regions of the country for voice and advanced services. By allowing competitors to share these economies, unbundling will facilitate, not deter, facilities-based competition, and holds out the best hope of bringing promptly to all consumers the many benefits of competition.

Most commenters agree that rules that identify elements to be unbundled on a nationwide basis are far preferable to rules that address unbundling on a case-by-case or state-by-state basis. Most notably, the majority of State Commission comments urge the Commission to identify a core group of elements that should be unbundled on a uniform, nationwide basis. The various case-by-case unbundling rules proposed by the ILECs share two common defects. First, they are underinclusive, in that they would deny competitors access to elements in many situations where the denial would impair their ability to offer service. Second, they would result in interminable delay and unnecessary cost by involving regulators and courts in difficult and often subjective evaluations of the dynamics of individual local markets. The record in this proceeding demonstrates that no practical alternatives to network elements leased from the ILECs currently are available in many, if not most cases. Thus a rule requiring these elements be available on a nationwide basis is far preferable to a rule designed to capture the relatively exceptional case in which ILEC elements are not needed. This is especially true where, as here, the risks of an underinclusive regulation are great, and the risks of a regulation that may in certain instances be overinclusive are negligible, especially given the overriding incentive of CLECs to avoid reliance on their dominant competitor.

Most commenters agree that section 251 should be given its natural construction, allowing the Commission to consider other factors, in addition to impairment and necessity, in determining whether or not to unbundle an element. The ILECs' arguments that other factors ought to limit the reach of the Act's unbundling requirement are without merit. BellSouth argues that consideration of the need to preserve the ILECs' incentives to invest in innovative technology counsels against unbundling, and even ought to trump an unbundling request when the CLEC would be impaired without the element. But while BellSouth (and the other ILECs) have produced no evidence showing that this concern about ILEC investment is well-founded, the comments and supporting declarations of MCI WorldCom and others conclusively show that leasing will not discourage ILEC investment in new or innovative facilities. Nor will unbundling deter investment by CLECs that do not want to defend any more than necessary on their principal competitors. Similarly without merit are the ILEC claims that the Commission should ignore the fact that in section 271 of the Act Congress itself already determined that unbundling on a nationwide basis of core network elements is an essential prerequisite for local competition.

Also unavailing is the ILECs' reliance on the essential facilities test, or on tests even more strict than the essential facilities doctrine. Although the ILECs attempt to brush aside Congress' decision to use the words *Anecessary* and *Aimpair*, the plain and ordinary meaning of these terms is that *Anecessary* is more lenient than *Aessential*, and *Aimpair* is more lenient than *Anecessary*. The question is whether the Commission should limit the leasing obligation to only those facilities that are essential in the antitrust sense. That result would be contrary to the language, structure, and purpose of the Act. Nor, contrary to ILEC suggestions, did the seven-member majority of the Supreme Court endorse any particular definition of the word *Aimpair*, much less the definition proposed by the ILECs. It simply required the Commission to adopt *A*some limiting standard, rationally related to the goals of the Act. Iowa Utilities Board, 119 S.Ct. at 735.

As important as the construction given to the terms *Aimpair* and *Anecessary* is the way the standard is applied to the various network elements under consideration. The ILECs argue that each element must be analyzed on a stand-alone basis to determine if CLECs would be impaired without access to the element and support their claim with an exhaustive catalog in that purports to identify non-ILEC network components. If there is a single alternate source for the element in question in that catalog, that, according to most of the ILECs, ought to end the inquiry. But this approach would deny access to elements that CLECs need to be able to complete. Elements must be connected to one another to provide service; in particular, CLECs need an efficient means to connect their networks to unbundled ILEC loops. In determining whether CLECs need access to ILEC switches, for example, the Commission must first consider if there is some efficient way for CLECs to connect ILEC loops to the CLECs' switches and to do so without protracted delays. If there is not, then the CLECs are impaired without access to the ILEC switches, even if in some abstract sense a CLEC is free to purchase a switch from a switch vendor.

Each one of the core network elements should be unbundled:

Loops (including NID, Intrabuilding Network Cable, and Electronics). There is virtual unanimity that loops are a classic bottleneck element that need to be provided if there is to be any prospect of local competition. The ILECs correctly observe that MCI WorldCom and others occasionally connect their fiber rings directly to large business customers, but they fail to propose an administrable rule that would enable the Commission (or state commissions) to identify in advance those situations in which CLECs would not be impaired without access to ILEC loops because they are able profitably to deploy their own fiber optic networks. The ILECs' wildly different limiting proposals are implausible and arbitrary, and merely prove that no manageable limiting rule would accomplish the legitimate purpose of prohibiting leasing where self-provisioning is feasible. Nor is there any reason for such a rule. The availability of unbundled loops will not slow MCI WorldCom's continuing efforts to expand its local network.

Transport. No ILEC seriously denies that CLECs would be impaired without access to shared transport facilities that enable CLECs to share in the tremendous economies of scale and scope reflected in their transport network. The ILEC proposals regarding dedicated transport each exhibit the same flaw as their proposals regarding loops because the ILEC proposals for identifying available alternative sources are underinclusive and application of many of them would be administratively unworkable.

Switching. Like most other competitors, MCI WorldCom does not lease ILEC switching in order to combine it with its own loops and transport, but to use it as part of a combination of elements including ILEC loop and transport. The opening comments of MCI WorldCom and

others demonstrate that CLECs are profoundly impaired without access to this combination of ILEC elements, which includes switching. The ILEC comments are entirely beside the point, for they treat switching as a stand-alone element, and fail to address the economics and network issues involving switching as it is actually used by CLECs, and as it is actually configured in the ILEC network.

Signaling. Most commenters, including most ILEC commenters, agree that the ILEC switching element does not work without access to the ILEC's signaling and call-related databases. If CLECs are impaired without access to ILEC switching, they are therefore by the same token impaired without access to those signaling systems and databases. The record establishes that there is no adequate substitute for the ILECs own ubiquitous signaling systems; indeed, the ILECs alone maintain many of the critical databases. Moreover, none of the functionalities to which the CLECs seek access is proprietary in nature, and they were instead designed to a uniform standard to allow seamless interconnectivity between networks.

OSS. Virtually all commenters, including the ILEC commenters, agree that operations support systems (OSS) must be unbundled.

OS/DA. Finally, the opening comments demonstrate that there is not yet an alternate supplier of operator services and directory assistance databases equal in quality to the ILECs. Accordingly, CLECs are impaired without access to those ILEC databases. Equally to the point, unless CLECs use their own switches, they cannot efficiently interconnect to their own DA and OS platforms because ILEC subscribers do not currently provide customized routing (to the CLEC platforms) that the CLEC can use. For this reason as well, so long as CLECs need to rely on ILEC switching, they also need to rely on ILEC OS and DA platforms.

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REPLY COMMENTS OF MCI WORLDCOM, INC.

I. INTRODUCTION

In reply to Comments filed in response to the Second Further Notice of Proposed Rulemaking, (ASecond FNPRM≡), in the above-captioned dockets,^{1/} MCI WORLDCOM, Inc., (AMCI WorldCom≡), hereby respectfully submits these Reply Comments.

II. SECTION 251 SHOULD BE CONSTRUED TO FACILITATE THE USE OF UNBUNDLED NETWORK ELEMENTS AS A COMPLEMENTARY MEANS TO FOSTER PROMPT AND UBIQUITOUS LOCAL COMPETITION

Virtually all commenters agree that the purposes of the 1996 Act are to promote the prompt development of ubiquitous local competition, to encourage investment by all sectors of the industry, and to do so in a way that minimizes the need for intrusive regulatory intervention in the businesses of competitive local exchange carriers (ACLECs≡) and incumbent local exchange

^{1/} Second Further Notice of Proposed Rulemaking, In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket 96-98, FCC 99-97 (rel. Apr. 16, 1999) (ASecond FNPRM≡).

carriers (AILECs). See, e.g., Ameritech Comments (AAmeritech) at 15; BellSouth Comments (ABellSouth) at 7; United States Telephone Association Comments (AUSTA) at 2, 3, 9, 18, 19; AT&T Comments (AAT&T) at 13; Competitive Telecommunications Association (ACompTel) at 3-4. Not surprisingly, however, the ILEC commenters seek to qualify and constrict the Act's purposes in order to preserve their monopolies over local telephone service. Six points deserve mention.

First, section 251(c) of the Act includes the unbundling obligation for ILECs as an important and procompetitive means for CLECs to enter local telecommunications markets, along with facilities-based entry and resale. Iowa Utils. Bd. v. FCC, 120 F.3d at 753, 791 (8th Cir. 1997), aff'd in part, rev'd in part sub. nom. AT&T Corp. v. Iowa Utils. Bd., 119 S. Ct. 721 (1999). Contrary to ILECs' contentions, see, e.g., BellSouth 4-5 (Act cannot be read to suggest that more unbundling is better than less); U S West Comments (AU S West) at 3-5 (unbundling should occur only where there is market failure or where costs of sharing are outweighed by benefits), the Act does not treat unbundled network elements (AUNEs) as a disfavored method of entry.^{1/} Nothing in the language, structure, or legislative history of the Act suggests that the Commission should take a grudging or reluctant attitude toward the availability of UNEs. To the contrary, as explained in MCI WorldCom's initial comments and below, ILECs must make UNEs

^{2/} Consistent with this view, the Eighth Circuit interpreted the requirements of section 251(c)(3) broadly. See 120 F.3d at 808-11 (upholding the FCC's broad definition of network elements), id. at 813-15 (upholding the FCC's conclusion that CLECs may provide local service entirely using UNEs) id. at 815-17 (rejecting the ILEC argument that unbundling will hinder development of facilities-based local competition or discourage innovation). The Supreme Court endorsed the Eighth Circuit's view on each of these points, AT&T v. Iowa Utils. Bd., 119 S. Ct. at 734, 736-38.

available to all CLECs on a nondiscriminatory basis when denial of access would Aimpair≡ -- not Adestroy≡ or Ademolish≡ -- the ability of any requesting CLEC to provide any service it seeks to offer.

A second, and related, point is that the ILECs give insufficient weight to the legislative intent to promote the prompt development of local competition. In fact, the Act A provides for unbundled access to incumbent LECs= network elements as a way to jumpstart competition in the local telecommunications industry.≡ 120 F.3d at 811 (emphasis added); id. at 816 (ACongress recognized that the amount of time and capital investment involved in the construction of a complete local stand-beside telecommunications network are substantial barriers to entry, and thus required incumbent LECs to allow competing carriers to use their networks in order to hasten the influence of competitive forces in the local telephone business.≡). Thus, although the ILECs claim that the Commission should be content if entry may occur within the next two years, see, e.g., BellSouth at 15-16, the Act=s goal in 1996 was to promote competition promptly, not in the next millennium. S. Rep. No. 104-23, at 1 (1995) (AS. Rep.≡); H. Rep. No. 104-204, at 1 (1995) (AH. Rep.≡). See Declaration of John E. Kwoka, Jr. (AKwoka Initial Decl.≡) & 16 (attached to MCI WorldCom opening comments as Tab 2). The fact that uncertainty about the availability of specific UNEs remains more than three years after enactment, and that no meaningful local competition has become established in the meantime, highlight the fact that access to UNEs is critical to the prompt emergence of competition.

Third, contrary to the ILECs= views, the Act preserves the ability of different CLECs to pursue different entry strategies, and does not favor one strategy over another. Although one CLEC may not need access to an unbundled ILEC element, another CLEC, with a different entry

strategy, may. In fact, Congress contemplated that a variety of companies would adopt a variety of business plans to bring competition to the local marketplace. S. Rep. at 4-10. Of course, we readily agree that the purpose of the Act is to promote competition, and not particular competitors (including inefficient competitors). See, e.g., Ameritech at 19; Bell Atlantic Comments (ABell Atlantic \equiv) at 8; USTA at 8. But the unbundling requirements liberate new entrants from the potentially slow, expensive, and incomplete options of purely facilities-based entry and resale; they do not impose a straightjacket into which only the ILECs' vision of a desirable competitor must fit. If a CLEC's ability to pursue a particular strategy would be impaired by denial of unbundled access, section 251(c)(3) guarantees its availability. After all, section 251(d)(2)(B) considers the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer (emphasis added) - - not the services that other CLECs offer or that the ILEC offers or would like the CLEC to offer. See Reply Declaration of John E. Kwoka, Jr. (AKwoka Reply Decl. \equiv) & 10 (attached hereto as Tab 10).

Fourth, unbundling should occur in a way that drives local rates to competitive levels and facilitates innovative and high-quality services. One critical goal of the 1996 Act is to reduce the retail price that the ILECs have been able to extract from consumers in a monopoly environment. This goal is advanced when CLECs can obtain elements at a cost-based rate from ILECs that is significantly lower than the rates others would pay to any alternative source. Equally important, unbundling may enable CLECs to provide more innovative and better services more quickly and ubiquitously than they would otherwise be able to do. As the Eighth Circuit recognized, by facilitating competition, unbundling facilitates innovation. Iowa Utils. Bd. v. FCC, 120 F.2d at 816-17.

Fifth, the acknowledged Aderegulatory≡ goal of the Act, see, e.g. BellSouth at 7, means that the Commission should strive for rules that are easy to apply and that are efficient in their application. For example, any rule that sought to restrict unbundling by requiring regulators to evaluate the business plans of individual CLECs on an ongoing basis would mean more, not less, regulation, especially if the ILEC has to make the element available to some customers in some parts of its region on a nondiscriminatory basis and at cost-based rates.

Sixth, the Act requires ILECs to unbundle network elements if unbundling would facilitate competition in the local marketplace as it exists today. This may mean that a particular element will be unbundled only on a transitional basis until local markets have evolved to the point where denial of access will not impair CLEC competitiveness. But temporary access may be a crucial means to accelerate the establishment of effective local competition and certainty will be ensured for local entry.

III. THE COMMISSION SHOULD IDENTIFY CORE NETWORK ELEMENTS THAT MUST BE UNBUNDLED ON A UNIFORM NATIONWIDE BASIS

The ILEC comments do nothing to undermine the force of the Commission=s determination in its initial Local Competition Order, consistent with its rulemaking obligation in section 251(d)(1) and (d)(2), that the Commission should establish a core group of network elements that must be uniformly unbundled on a nationwide basis. See MCI WorldCom Comments (AMCI WorldCom≡) at 4-10. Nothing has changed in the last three years to justify a different approach. Indeed, the various ILEC proposals to restrict unbundling on a case-by-case basis for narrow geographic and/or product markets serve to substantiate MCI WorldCom=s position that a case-by-case approach would frustrate the fundamental purposes of the unbundling requirement in multiple ways X by denying CLECs access to UNEs when they need access in

order to compete effectively, by imposing unnecessary costs on ILECs, by delaying the advent of local competition, and by creating a regulatory morass for both federal and state commissions. Just as they have done under the original unbundling regulation, state commissions will continue to perform an important role in applying the Commission's unbundling requirements and in extending them when necessary to further the Act's goals of introducing competition rapidly into local markets.

A. The Commission Should Impose Uniform Nationwide Rules

The case-by-case approach advocated by the ILECs that would require unbundling only at some locations or for some customers would be a recipe for disaster. First, all of the case-by-case standards proposed by the ILECs are predictably underinclusive in that they would deny CLECs access to elements even in situations where the denial would impair their ability to offer services they seek to offer. For example, SBC's proposal to exclude loops connecting certain large business customers from the unbundling obligation would deny many customers the benefit of competition through unbundled loops. Some differences in various geographic areas and product segments may have some correlation with the degree to which a CLEC is impaired without access to an ILEC's elements. But no accurate, reliable, and practical method exists for drawing lines by particular regions, wire center areas, or product markets that includes only the customers the CLEC would be materially hampered in serving without unbundled access to an element.

Second, implementation of a case-by-case approach would generally retard the development of local competition and significantly raise the cost of entry. See Kwoka Initial Decl. & 34. For example, U S West would have the Commission establish a rebuttable presumption against unbundling of high-capacity loops, putting the burden on CLECs to

demonstrate that their ability to serve individual customers would be impaired if unbundled access were denied. See U S West at 39. That the presumption is rebuttable reflects even U S West=s recognition that its proposal is too restrictive. CLECs would therefore be forced to use their resources to pursue an endless series of proceedings to rebut the presumption, and the history of the last three years demonstrates that ILECs would force CLECs to litigate meritorious claims. BellSouth=s proposal for unbundling according to geographic zones exemplifies the chaos and consequent barriers to entry that would ensue from this type of rule. See BellSouth at 1-3, 13, 29-30. See also Ameritech at 5, 53, 58, 65; USTA at 4,17, 24, 31; U S West at 28-30. BellSouth demands that different unbundling rules apply in different zones in each state, although BellSouth does not make clear exactly how the zones would be defined, what the respective roles of federal and state regulators would be in defining these zones, or whether and how parties might attack a given zone assignment or boundary. BellSouth at 1-3, 29-30. Given the limited resources and enormous competing demands on the time of federal and state commissions, and the lack of clarity in BellSouth=s proposal, proceedings to define these zones would inevitably take months to complete, leaving CLECs high and dry in the meantime. The result would be exactly what the ILECs want: CLECs would have to divert resources from competition to litigation, the development of competition would be forestalled if not foreclosed, and over-analysis would produce paralysis. A No one can seriously believe that competition in the local exchange would emerge out of this administrative and legal black hole.≡ Kwoka Initial Decl. & 34.

The third point is related to the second: a case-by-case approach requiring regulators to sift through CLEC-specific, area-specific or customer-specific evidence of impairment would be contrary to the deregulatory purposes of the Act. To implement this approach, government

officials would, for example, have to evaluate the actual and likely success of individual CLECs in individual markets, and to do so on a continuing basis as competition - - however stifled - - gradually evolves. Macro-regulation is essential to allowing unbundling to serve its crucial role under the Act, but the micro-regulatory morass into which the ILECs would plunge the regulators is totally antithetical to the deregulatory thrust of the Act. That is why most of the state commissions that filed comments advocate uniform nationwide rules for unbundling of the seven core elements designated by the Commission in the Local Competition Order or at least of the elements identified in the 271 checklist.^{1/} The burdens that the ILECs= proposed case-by-case

^{3/} See Connecticut DPUC at 4 (ACTDPUC recommends that the FCC reaffirm those unbundled network elements originally identified by the Commission in its First Report and Order); Illinois Commerce Commission (AICC) at 11 (AThe ICC recommends that the FCC re-establish the original minimum list of seven network elements); *id.* at 14-15 (advocating further unbundling of sub-loops and dark fiber); Iowa Utilities Board at 6-7 (AThe network elements from the 271 checklist easily satisfy even the >necessary= standard and should continue to be on the nationwide unbundled network elements list, even if they are proprietary);

approach would place on state commissions would generally be as unwelcome as they would be anticompetitive.

Only an unbundling requirement that focuses on general needs and not on exceptions to the rule will enable CLECs to provide the services they seek to offer and thereby introduce competition into local markets promptly and ubiquitously. The record in this proceeding establishes that, as a general rule, the core elements that MCI WorldCom proposes to be covered by a nationwide rule are not practically available to CLECs from alternate sources, either self-provisioned or third-party provisioned. See, e.g., Declaration of Sherry Lichtenberg

Kentucky PSC at 2 (AReinstatement of the FCC=s initial list of UNEs is necessary to promote meaningful competition. . . . [T]he Kentucky PSC has concluded that local competition will not occur unless key UNEs are available on a platform basis≡); Texas PUC at 14 (A[T]he Texas PUC supports the list of seven UNEs set forth by the FCC in the Local Competition First Report and Order,≡ because they are Anecessary≡ to provide telecom service and the lack would impair CLECs= meaningful opportunity to compete) id. at 15-18 (stating that sub-loops and dark fiber are unbundled in Texas); Washington UTC at 14 (stating that the WUTC supports unbundling of elements listed in the 271 checklist, because loops and Operations Support Systems (AOSS≡) are Aabsolutely essential to a CLEC=s ability to provide local service,≡ and all of the other elements on the list are Anecessary≡).

(ALichtenberg Decl.≡) (attached hereto as Tab 11) (explaining why switching is not practically available to CLECs from alternate sources).

The Commission should require unbundling of an element on a nationwide basis if the record shows that lack of access would produce impairment in a substantial percentage of cases or for any significant class of customers in any significant area, even if lack of unbundled access to a network element would not impair some CLECs' ability to offer some services in some other cases. If CLECs' ability to provide the services they seek to offer to any material group of customers, whether defined geographically or otherwise, is impaired, then the purposes of the Act require that the element be made available on an unbundled basis. Otherwise, substantive segments of the nation will be denied the benefits of local competitions.

The benefits of this uniform approach are manifest because it would avoid costs and delays described above that a case-by-case approach would impose on CLECs and regulators. The costs of a uniform approach are minor at worst. First, CLEC self-interest will cause them not to lease the element in any cases where they can reasonably avoid reliance on their major competitor. Second, to the extent that alternative sources of the elements are generally available in some areas or for some customers, effective competition at the wholesale level would give ILECs an incentive to lease elements so that they can keep traffic on their networks - - just as interexchange carriers have incentives to engage in vigorous competition to provide interexchange services on a wholesale basis.^{1/} Third, the Commission will have to establish the terms and conditions of access

^{4/} See Declaration of Ken Baseman, Rick Warren-Boulton and Susan Woodward & 20-21 (ABaseman/Warren-Boulton/Woodward Decl.≡) (attached hereto as Tab 12); see also Memorandum Opinion and Order, In re Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc. 13 Communications Reg. (P & F) 477 (1998)).

in any event because ILECs will make elements available on an unbundled basis in at least some circumstances. Although the Act protects competition and not just individual competitors, ILEC interests are protected by the requirement that in all cases, CLECs must pay cost-based rates, including a reasonable profit. See 47 U.S.C. § 252(d)(1).

In any event, the overriding consumer interest in fostering the rapid development of effective local competition, after years of ILEC-induced delay, justifies an unbundling rule that is overinclusive rather than underinclusive. Consumers can only benefit if key network elements are available at the wholesale level at their economic cost because retail competition will cause the savings to be reflected in lower retail prices for local telecommunications services. The harm to consumers and competition from a crabbed construction of the unbundling requirement far exceeds any possible risk to the ILECs from a more expansive interpretation.^{1/}

For these reasons, MCI WorldCom urges the Commission to designate a core set of elements that must be uniformly unbundled on a nationwide basis.

B. The Roles of the Commission and State Regulators

^{5/} See, e.g., Resorts Int'l Hotel Casino v. NLRB, 996 F.2d 1553, 1558 (3d Cir. 1993) (approving rejection of rule requiring burdensome and subjective inquiry in favor of bright-line rule because A[a]lthough the rule may not produce the perfect result in all cases, >the best should not be the enemy of the good= (quoting Pennsylvania v. ICC, 535 F.2d 91, 96 (D.C. Cir. 1976) (upholding certain rail regulations because alternatives would either be too expensive or too omplex to administer.) A[T]here may be impossibility in substance and in effect even when something can be achieved, but at a cost taht wholly outweighs any conveyable benefit.=.

For over three years, state commissions have applied nationwide unbundling rules formulated by the Commission without any complaint that the Commission left the states with too little to do. Continuing the approach in the original Rules 317 and 319 X an approach not called into question by the Supreme Court=s remand X will continue to maximize the prospects for local competition. Indeed, that is precisely why Congress instructed the Commission in section 251(d)(1) to promulgate unbundling requirements and obligated the states to apply them in arbitration proceedings pursuant to section 251(c)(1). Even a major ILEC like SBC recognizes the benefits of a rule that applies consistently across state and even national borders. See SBC Comments (ASBC≡) at 18-20. State commissions will continue to have a critical role in arbitrating unbundling disputes pursuant to section 252, identifying additional network elements that should be unbundled pursuant to the standards in a revised Rule 317, and determining the terms and conditions for access to all of these UNEs.

Contrary to the position of some ILECs and state commissions, the Commission should not delegate to state commissions its responsibility under section 251(d)(2) to establish standards and identify an initial list of elements that must be unbundled. BellSouth at 29-30; USTA at 45; Ameritech at 48-49. The Commission has as complete a record as any state commission could develop as the basis for determining the scope of the unbundling requirement, and forcing CLECs to fight the same fight more than 50 times instead of once will only consume resources that should be more usefully deployed in the competitive struggle. For the reasons explained above, and contrary to ILEC arguments, BellSouth at 29-31; Ameritech at 48-49; U S West at 28, the unbundling obligation should not vary from state to state, or from end office to end office, or from customer to customer, depending on alleged differences in local conditions. In any event,

the conditions that create impairment do not vary from state to state, and a CLEC that has the right to unbundled access to an ILEC element in certain circumstances in one state ought to have the same right in any other state where the same circumstances exist. Allowing each state to formulate its own unbundling regulation would inevitably lead to inconsistent approaches. AThe comments of the Ohio PUC demonstrate that delegation to state commissions will result in inadequate and unsupported unbundling rules. Rejecting the recommendation of most other state commissions that filed comments addressing the same issue (including the ICC, which also regulates Ameritech), the Ohio PUC concluded that Ameritech should not be required to unbundled operator services/directory assistance, switching, or interoffice transport. Ohio PUC at 5-6. If the Commission permits state commissions to perform the role that Congress expected the Commission to carry out in determining which elements should be unbundled, ill-considered and unjustified decisions will inevitably result. Some of the states (as the comments reflect) will make the right decisions, but the wrong decisions would deny millions of the customers the benefits of competition and seriously obstruct the ability of CLECs like MCI WorldCom to implement national business plans. In short, the result of a state-by-state approach would be denial of access to elements in some states even though impairment will surely occur.^{6/}

^{6/} It would create exactly the same problems for the Commission to delegate to the states authority to determine when to terminate Commission-defined unbundling obligations as it would to delegate the authority to define those obligations in the first place.

Some ILECs have disputed the states' right to supplement the Commission's list of elements that must be unbundled. See, e.g., BellSouth at 29-30; U S West at 31. However, the Commission correctly recognized that its unbundling requirements generally set a floor, not a ceiling, for state commissions. That is why the Commission promulgated Rule 317 to define the standards that state commissions should apply in determining which additional elements should be unbundled. Congress included provisions in the Act specifically intended to allow states to enforce rules that further the procompetitive goals of the Act. Section 251(d)(3) of the Act allows states to enforce Any regulation, order or policy of a state commission that establishes access and interconnection obligations of local exchange carriers, that is consistent with the requirements of this section, and that does not substantially prevent implementation of the requirements of this section and the purposes of this part. The plain language of section 251(d)(3) clearly allows states to impose unbundling requirements above and beyond those established by the Commission, including supplementing the minimum national standards adopted by the Commission. See also 47 U.S.C. § 261(b), (c) (providing that states are not precluded from enforcing existing state regulations and imposing additional state requirements so long as the regulations or requirements are not inconsistent with the Act).^{1/}

^{1/} Other sections of the Act also preserve states' rights to enforce their own laws, rules and regulations. See Pub. L. No. 104-104, § 601, 110 Stat. 56, 143 (Feb. 8, 1996), reprinted at 47 U.S.C.A. § 152 Hist. and Stat. Notes (West Supp. 1998) (uncodified) (providing that the Act shall not be construed to modify, impair, or supersede state or local law unless expressly provided in the Act).

Some ILECs make the related demand the Commission to preempt state laws to the extent they impose a broader unbundling obligation than the Commission defines in this proceeding. See, e.g., GTE Comments (AGTE) at 29; SBC at 20. Just as it would generally further the purposes of the Act for a state commission to apply the new version of federal rule 317 to add elements to the minimum list developed by the Commission, it would generally further the purposes of the Act for state commissions to reach the same result under state law. The ILECs cite no authority for the Commission to preempt any such state law based on this record. See 47 U.S.C. § 252(e)(3), (f) (preserving the right of a state commission to establish[] and enforce[] other requirements of State law in its review of interconnection agreements or statements of generally available terms). Section 253 contemplates preemption only if a state legal requirement may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service, and enforcement of procompetitive state laws would not run afoul of section 253.

Incredibly, some ILECs go so far as to argue that although (they contend) states are precluded from adding elements to a nationwide list and supplementing the Commission's minimum unbundling requirements, states should be permitted to deny access to network elements that the Commission determined should be unbundled. BellSouth at 30 (A While [a State's] reducing the [Commission's] list is consistent with Congress's de-regulatory goals, adding to it is not.); see also U S West at 31. To MCI WorldCom's knowledge, states have rarely attempted in the last three years to deny access to any element covered by the Commission's previous

unbundling regulation, and for good reason.^{1/} The ILECs do not identify, and MCI WorldCom cannot imagine, any circumstances in which a state regulation inconsistent with the Commission's minimum requirements would satisfy the requirements of section 251(d)(3). To the contrary, it should be apparent that denial of access to an element in the face of a Commission finding that impairment would result would be inconsistent with the requirements of section 251 and substantially prevent implementation of the Act's requirements. However, the Commission need not and should not decide this question in the abstract. See Iowa Utils. Bd., 120 F.3d at 806-07.

For all these reasons, the Commission should promptly exercise its authority, and its responsibility, to promulgate uniform nationwide unbundling rules for state commissions to apply and, where appropriate, extend.

IV. PROCEDURAL ISSUES

A. Evidentiary Standards

Several commenters state that in this rulemaking CLECs should bear the burden of production or proof. See BellSouth at 28-29; GTE at 3-4; USTA at 7, 8, 30; U S West at 32. Some even suggest heightened evidentiary standards for the CLECs' submissions. See GTE at 3-4 (convincing evidence); U S West at 30 (impairment must be clearly demonstrated); BellSouth at 30 (clear and convincing proof). Such standards are contrary both to statutory text and purposes. The Commission's goal should be to guarantee unbundling whenever it would facilitate the prompt development of local competition, not stretch for ways to deny it. Imposing

^{8/} MCI WorldCom has been obliged to litigate State commission failures to unbundle shared transport in several states.

the burden of proof on the CLECs, and especially a heightened burden, would frustrate the substantive purposes of the unbundling requirement.

In any event, this rulemaking is governed by section 553 of Title 5, which does not establish an express evidentiary standard for the support of a rule adopted through informal rulemaking. It is generally recognized, however, that Alegislative facts are not susceptible to the kind of evidentiary proof routinely required to support findings of adjudicative facts.⁹ 1 Kenneth C. Davis & Richard J. Pierce, Jr., *Administrative Law* § 7.5, 322 (3d ed. 1994). As MCI WorldCom stated in its opening comments, MCI WorldCom at 14, under well-established principles of administrative law, the Commission=s rule must rest on a reasonable interpretation of the statute and be supported by an explanation based on sufficient record evidence to provide a rational basis for its conclusions. See, e.g., Chevron USA, Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 844 (1984).¹⁰ Neither the Title 5 nor the Communications Act requires particular proof from specific parties, and certainly neither articulates a heightened proof standard like that proposed by some commenters. Commenters including MCI WorldCom and other CLECs, state commissions, and consumer groups have built a record more than ample to sustain a Commission determination that each of the network elements addressed herein should be unbundled on a national basis. This is all that is required.

Commenters have also suggested burdens of proof to be applied in future proceedings to modify a Commission - promulgated list of core elements. See BellSouth at 30-31 (CLEC burden of establishing or defending continuation of unbundling by clear and convincing evidence in state

⁹/ This standard is precisely the one the Commission followed in its first rulemaking in this docket, and no party challenged that standard.

public utility commissions); USTA at 4, 46 (sunset unless a CLEC proves that consumer welfare would suffer without continued unbundling). But, just as with this initial proceeding, additions to a Commission-promulgated list of core elements need simply be based on an adequate record. Neither the Commission nor the States should place inappropriate burdens on proponents of additional unbundling.

As to the separate circumstance in which a party may advocate elimination or modification of an unbundling requirement adopted in this proceeding, the party seeking such modification should have the burden to show that circumstances have changed substantially so as to justify the requested alteration. Moreover, the Commission should not delegate authority to states to eliminate or modify Commission unbundling requirements because such delegation would create all the same problems as delegating to states the authority to formulate the requirements in the first place.

B. Sunsets

Several ILECs endorse sunsets, proposing time limits of two to five years on at least some network elements. See, e.g., Ameritech at 106 (FCC should adopt loop sunset); USTA at 7, 17-18, 46 (two year sunset on all unbundling); U S West at 40 (5 year sunset on loop unbundling). Some additionally suggest an end to unbundling requirements upon the occurrence of certain conditions. See, e.g., BellSouth at 74-75 (sunset sooner than two years if wireless growth is faster than predicted); USTA at 7, 17-18, 46 (sunset to occur in two years or whenever any facilities-based competitor enters a market). As explained in the opening comments, see MCI WorldCom at 11-14, MCI WorldCom believes that sunset provisions, be they time-defined or event-triggered, would frustrate the purpose of the Act as these are necessarily based on unreliable predictions about the development of the market. Instead, the Commission should engage in a

periodic review of its regulations to examine evidence of changes in the market and their actual effect that might merit alteration of those rules. In such a proceeding, any decision to alter the regulations already in effect would, as in the initial rulemaking, need to be supported by record evidence. Moreover, given that the regulation in effect will be supported by evidence resulting from the Commission's current extensive examinations, MCI WorldCom reasserts that the regulations should remain in effect absent substantial new evidence of changed circumstances sufficient to justify a different conclusion. Motor Vehicle Mfrs. Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42 (1983) (indicating presumption against change to existing policies unless change is justified by record evidence).

Sunset provisions will also have anti-competitive effect. A time-defined sunset, set in advance, would encourage ILECs to withhold and slow-roll access to UNEs in hopes of outlasting the requirements. See U S West Communications, Inc. v. FCC, No. 98-1468, 1999 WL 362834, at *4 (D.C. Cir. June 8, 1999). (AIncentives are not as crucial in a situation where the business prohibition will be lifted in a fixed time . . . as where its duration depends on the BOC's own actions.)

Automatic event-triggered termination provisions would wreak havoc of CLEC business plan and the development of local competition. The sort of Asudden death≡ unbundling standard advocated by Hausman and Sidak embraced by USTA (Hausman and Sidak Affidavit in & 166 attachment to USTA), would create a totally unpredictable environment that would substantially increase the risk and cost of entry. Under a system where unbundling of an element is no longer required in an area as soon as one CLEC provisions that element in that area, a CLEC that decided to make the investment in some elements in one part of a market, relying on the

predictability of ILEC prices for other unbundled elements there, might find its entire business plan destroyed as another CLEC in that market, operating under its independent business plan, self-provided in another part of the market the element that the first CLEC obtained from the ILEC. Piecemeal shifting, and unpredictable unbundling of elements would destroy the ability of any CLEC to plan, and thus to invest in any facilities anywhere.

V. ADDITIONAL FACTORS

For the reasons stated in MCI WorldCom=s opening comments, see MCI WorldCom at 22-27, as well as the comments of Sprint Comments at 25-27, AT&T at 28 and Vermont Comments at 11-12, the Commission should consider factors in addition to impairment in determining whether to unbundle a particular element, and may decide to unbundle an element based on these other factors even if the need for the element does not otherwise satisfy the Aimpair≡ standard. No commentators successfully rebut this analysis, no doubt because it is grounded in the plain meaning of the statutory text.^{10/}

^{10/} Some commenters contend that unless the Commission makes a finding of impairment, unbundling is precluded. Ameritech at 47-48; USTA at 24; BellSouth at 25. But section 251(d)(2) on its face specifies that impairment is a consideration and not a requirement. See 47 U.S.C. § 251(d)(2) (Commission Ashall consider≡ impairment). Contrary to BellSouth=s suggestion, nothing in the Supreme Court=s decision precludes this reading of the Act.

BellSouth=s quotation from that opinion is not only taken entirely out of context but is almost entirely fabricated. See BellSouth at 25-26 (citing Iowa Utils. Bd., 119 S. Ct. at 735). Far from ruling that impairment is a requisite finding to unbundling, the Court said only that section 251(d)(2) Arequires the Commission to determine on a rational basis which network elements must be made available taking into account the objectives of the Act and giving some substance to the >necessary= and >impair= requirements.≡ Iowa Utils. Bd., 119 S. Ct. at 736 (emphasis added).

Several commenters argue that, regardless of whether CLECs= ability to offer service would be impaired without access to unbundled network elements, the Commission should reject broader unbundling rules because they discourage investment and innovation by both CLECs and ILECs. See, e.g., Bell Atlantic at 10-12; BellSouth at 26-27; USTA at 9-10, 21-22. As a threshold matter, the fundamental purpose of the Act to facilitate and accelerate local competition means that, at the very least, a heavy burden of justification should be placed on the proponent of an argument that access to unbundled elements should be denied even though it impairs the ability of CLECs to compete. The ILECs offer nothing more than unsupported speculation about effects on investment incentives, and in fact, the unbundling approach proposed by CLECs and most state commissions would not discourage either CLEC or ILEC investment.

First, CLECs will always have a strong incentive to self-provision network elements whenever it is efficient to do so, notwithstanding the availability of unbundled network elements from the ILECs at TELRIC rates. See, e.g., MCI WorldCom at 8-9, 26-27; AT&T at 11; CompTel at 12; Sprint at 16-19. See also Kwoka Reply Decl. && 8-9, Tab 10. This is because, in order to maximize their ability to compete with the ILECs, and to minimize the ability of the ILECs to interfere with that competition, CLECs will seek to avoid reliance for inputs on their dominant competitors. See, e.g., Kwoka Reply Decl. && 8-9, Tab 10.

The ILECs= contention that unbundling of the elements included in the original Rule 319 would deter CLEC investment is flatly contradicted by the ILECs= own insistence that CLECs have aggressively deployed facilities in parts of urban areas throughout the United States while Rule 319 and a liberal impairment standard were in effect. No observer can help but be impressed by the rapid and huge capital investments CLECs have made in the short time they have been

allowed to offer local service. None of this is surprising given CLECs= overriding incentive to avoid reliance on their dominant competitors wherever feasible.^{11/} The fact that this investment has

11/ The ILECs themselves well understand the powerful incentives supporting self-provisioning. In the SBC-Ameritech merger application SBC described its incentive and intent to self-provision wherever possible, and to rely on ILEC UNEs only when self-provisioning is not feasible:

The new SBC will rely heavily on its own facilities in entering these new markets. It will use a Asmart build≡ strategy by which it will construct the facilities that are most needed, combine them with unbundled elements purchased from the incumbent LEC and, where appropriate, transport networks owned by third parties. [In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications Inc., Transferee, Description of the Transaction, Public Interest Showing and Related Demonstrations, CC

occurred during a time when an impairment standard more liberal than the revised one the Commission will adopt in this proceeding demonstrates a fortiori that the standard proposed here by CLECs and most state commissions will not discourage CLEC investment.^{1/}

Second, ILECs= incentives to invest in their networks will not be undermined by mandatory unbundling rules. As explained in the Declaration of Ken Baseman, Rick Warren-

Docket No. 98-141, at 15 (filed July 24, 1998) (≡SBC-AIT Appl.≡)]

SBC went on to explain that for a national carrier, there is still another incentive to deploy its own facilities:

These customers seek the same services, features, functions and capabilities for all of their locations, which can only be provided by a company that has facilities-based capabilities across the United States and, in many cases, around the world. [Affidavit of James S. Kahan, paragraph 30, attached to SBC-AIT Appl.]

12/ CLECs= investment track record shows that entrants are wisely following market dictates and focusing their investment resources (1) where traffic is sufficiently dense to allow the entrants to exploit scale economies, and (2) on pure facilities-based solutions that allow them to avoid dependence on ILECs and diseconomies of connectivity. But the existence of these alternatives does not in and of itself show that they can be efficiently connected by CLECs to provide local services, and ongoing CLEC provision of local services would be impaired if access to ILEC UNEs were restricted.

Boulton, and Susan Woodward, ILECs faced with competition from CLECs using UNEs will respond to that competition by continuing to invest and innovate. See Baseman/Warren-Boulton/Woodward Decl. & 16, Tab 12. They will do so simply because they are better off investing than permitting their networks to deteriorate or to fall behind technologically. In other words, an ILEC will seek to preserve the value of its asset base so as to survive in the new, competitive world. If an ILEC does not maintain and upgrade its facilities, it risks having the CLECs build their own facilities and win over the ILEC=s customers. See id. && 16, 26. The fact that the CLECs as well as the ILEC will benefit from ILEC investment does not alter this conclusion: while ILEC investment and innovation improve the absolute position of both the ILEC and the CLECs in terms of the quality of service they can provide, the relative positions of the ILEC and CLECs will remain unaffected. See id. & 18. Thus, mandatory unbundling rules will not encourage, not discourage, ILEC investment in their networks.

For these reasons, BellSouth fails in its argument that the Commission could properly deny access, despite a finding that denial impairs the ability of CLECs to compete, because unbundling imposes unacceptable Asocial costs≡ in terms of reduced ILEC investment in innovative technologies. See BellSouth at 26-27. Any party that contends that access should be denied even though it impairs the ability of CLECs to compete should bear a very heavy burden under a statute designed to facilitate and accelerate local competition. BellSouth wholly fails to carry that burden. Nor is there any merit in BellSouth=s proposal that the Commission should require CLECs to provide specific evidence, because only ILECs have access to that information the burden to provide evidence of the effect of unbundling on ILEC investment incentives should not be on CLECs, as BellSouth proposes, but on ILECs, because only ILECs have access to that

information. More fundamentally, a very heavy burden of justification should be on the proponent of an argument under a statute designed to facilitate and accelerate local competition that access should be denied even though it impairs the ability to CLECS to compete.

Although of course it is true that the statute does not by its terms preclude the Commission from denying access based on factors other than Aimpairment,≡ in substance BellSouth=s argument is entirely without merit. Few of the elements to which CLECs would now like access represent innovative technologies developed by the ILECs. Equally to the point, Bell South does not provide an example of any such innovative technology whose implementation or development could plausibly be deterred by a leasing requirement. BellSouth proposes that the Commission should require CLECs to provide specific evidence of what any unbundling requirement would do to any particular ILEC=s investment incentive before it orders any unbundling. But that is of course the purpose of this very proceeding, and BellSouth itself provides no evidence whatsoever that any of its investments would have been in the least affected had it acknowledged an obligation to lease network elements. As MCI WorldCom demonstrated in its initial comments, MCI WorldCom at 9, and in the initial declaration of John E. Kwoka, Jr., AKwoka Initial Decl.≡ & 25, leasing will not affect ILEC investment in innovative technologies because they make little such investment in the first place, and get a risk-adjusted return for leasing that fully accounts for whatever investment risk they do take. The broad claim that the Asocial costs≡ of leasing outweigh the benefits of rapid competition that could be brought about through leasing is one that Congress has already rejected through the enactment of section 251. Although as a theoretical matter there may be an additional factor that is so extraordinary that it counsels against leasing an element even though CLECs are impaired without the element, no

commenter has suggested what such a factor could be or why the harm it would cause would be so great as to require that CLECs be deprived of facilities that impair their ability to compete.

VI. DEFINITIONS

A. IMPAIR

1. Application of Section 251(d)(2)

As the Commission previously stated, the focus of section 251 is to provide an efficient competitor with a meaningful opportunity to compete.≡ First Report and Order, In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 F.C.C.R. 15499, & 315 (1996) (A Local Competition Order≡). A Meaningful opportunity≡ includes the opportunity to employ UNEs when denial of access would materially delay, raise the costs, or reduce the quality or novelty of service to any customer in any area.

Several commenters have indicated that the A necessary≡ and A impair≡ determinations should be based on the effect on a A reasonably efficient CLEC.≡ See, e.g., BellSouth at 20-22, SBC at 5, 7; U S West at 11; Ameritech at 5, 36. MCI WorldCom agrees that the statute is not designed to sustain an inefficient would-be market entrant, and that it is appropriate to consider whether the ability of a A reasonably efficient≡ competitor to compete effectively would be impaired if denied access.

But although the statute is not aimed at assisting nonviable competitors, neither is it calibrated to the performance of the company in a given market whose business plan allows it to furthest reduce reliance on ILEC elements. The Commission must examine the whole of record evidence for this proceeding to establish national judgments about what network elements

reasonably efficient competitors may require.^{13/} It should not adopt the proposition, see Hausman and Sidak Aff. & 134 (attachment to USTA); Bell Atlantic at 20, that the existence of a single CLEC using a non-ILEC network element in a specific market be taken as conclusive proof that a reasonably efficient CLEC need not have unbundled access to that element in order to compete. The abilities of the reasonably efficient competitor should not be derived from the isolated action of one market participant, whose business plan and circumstances may differ significantly from those of other CLECs.

2. The essential facilities doctrine does not govern application of section 251(d)(2)

MCI WorldCom's initial comments showed it inappropriate for the Commission to rely on the antitrust essential facilities doctrine to determine the network elements that must be unbundled pursuant to section 251(d)(2).^{14/}

^{13/} The record established by individual CLECs in this proceeding demonstrate that under current market conditions, each would be impaired by the failure to unbundle. In light of this evidence, and to avoid the anticompetitive administrative costs and possible discriminatory consequences of issuing individual rulings for different carriers, the Commission may apply its expertise to generalize from the record evidence a rule of general applicability to all carriers, nationwide. Such a rule will fulfill the Commission's obligation to devise a sensible regulation that can be applied with the least amount of regulatory involvement and risk of litigation.

^{14/} See MCI WorldCom at 28-37.

The ILECs concede that the full force of the essential facilities doctrine does not apply. GTE at 16 n.9; U S West at 6. Instead, they argue that the doctrine applies only by analogy. Strikingly, several ILECs argue that the Commission ought to apply a stricter standard than the most demanding version of the essential facilities doctrine. See Hausman and Sidak Aff. & 22 (attachment to USTA). The ILECs= position is unjustified. See generally Kwoka Reply Decl. & 30.

The ILECs seek to create the impression that the essential facilities doctrine is a regulatory test having the same purposes as the Act.^{15/} Though both the Act and the antitrust laws enhance consumer welfare by attempting to correct market problems, the purposes of the essential facilities doctrine are much more limited than those of the Act. See Kwoka Reply Decl. && 21-37, Tab 10 (quoting Areeda AAn essential facility must be more than an input for which the

^{15/} See e.g., Ameritech at 30-31 & n.78. Ameritech cites to a student=s law review note, Elizabeth A. Nowicki, Competition in the Local Telecommunications Market: Legislate or Litigate?, 9 Harv. J. Law & Tech. 353 (1996). But that article actually undermines the ILECs= position. Ms. Nowicki recognizes that the Act imposes a different standard than the antitrust laws where she argues that ACongress would have been wiser to subject local exchange carriers to antitrust laws, rather than the Act.≡ Id. at 363. MCI WorldCom disagrees with Ms. Nowicki=s arguments about the effects of the Act on competition, but concurs that the Act=s cooperation requirements are broader than those imposed by the antitrust laws. Congress intended that CLECs have remedies under both the Act and the antitrust laws, precisely because the remedies under each are different.

monopolist enjoys a cost advantage, lest we turn every dominant firm enjoying scale economies into a public utility.≡).

Nor do the ILECs rebut MCI WorldCom=s showing that section 251(d)(2) does not incorporate the essential facilities doctrine because Congress chose to employ two standards -- the Anecessary≡ and Aimpair≡ standards -- that are more lenient than the Aessential≡ standard.^{1/} The ILECs concede that the essential facilities doctrine and section 251(d)(2) are Adifferently stated.≡^{1/} Nevertheless, they brush aside the Act=s specific language, apparently hoping that the Commission will do the same. In particular, some ILECs attempt to conflate the Anecessary≡ and Aimpair≡ standards to imply that section 251(d)(2) has only one standard, not two.^{1/} That trick is necessary for the ILECs to argue that the Act=s language is consistent with an essential facilities standard. But, as we showed in our earlier comments, Anecessary≡ is more lenient than Aessential≡; and Aimpair≡ is more lenient than Anecessary.≡^{1/} With Congress having chosen two standards that are less strict than Aessential,≡ it cannot be fairly argued -- as the ILECs try -- that essential, necessary, and impair all effectively mean the same thing.^{1/}

^{16/} See e.g., MCI WorldCom at 30-32.

^{17/} E.g. U S West at 6.

^{18/} See e.g., Ameritech at 29.

^{19/} MCI WorldCom at 30-31; accord AT&T at 48-49.

^{20/} GTE argues that Anecessary≡ and Aimpair≡ should be read in their Ajudicially settled meaning.≡ Then, GTE says they should be interpreted in the Alegal context≡ of the essential facilities doctrine. GTE at 14-15. However, the antitrust laws augment the Act; they do not duplicate it. Congress expressly included an antitrust savings clause. MCI WorldCom at 35-36. Even if Congress did intend the Act to be interpreted in the Alegal context≡ of contemporary antitrust law, GTE is wrong in asserting that the Aessential facilities≡ doctrine is Athe only

relevant line of authority . . . under which an incumbent firm can be compelled to share its facilities with competitors.[≡] GTE at 15. The Supreme Court has expressly endorsed other theories that compel sharing. E.g., Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 483 n.32 (1992); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 601, 611 n.44 (1985).

Lacking support for an essential facilities standard in the language of the Act, the ILECs argue that Congress must have adopted a limited essential facilities standard because Congressional reports have recognized that the ILECs have control over, and the CLECs need to access to, Aessential facilities.^{21/} But the issue is not whether the ILECs control certain Abottleneck^{22/} facilities that are essential to the existence of competition (although they do). Instead, the issue is whether the CLECs= UNE rights are limited to network elements that are essential to the survival of competition. CLEC UNE rights are not so limited. As MCI WorldCom=s initial comments demonstrated, Congress was aware of the essential facilities doctrine, previously used the Aessential facilities^{23/} term in other proposed legislation, and chose not to incorporate that term in the Act.^{1/}

The ILECs argue that the Supreme Court=s decision in Iowa Utilities Board Aembraced^{24/} the fundamental precepts of the essential facilities doctrine.^{1/} But the Supreme Court expressly stated that it was not deciding whether the Commission should apply the essential facilities standard; and specified that Ait may be that some other standard would provide an equivalent or better criterion for the limitation up on network-element availability that the statute has in mind.^{25/} Iowa Utils. Bd., 119 S. Ct. at 734-35. The majority=s discussion required only that the

^{21/} See e.g., Ameritech at 30-32; GTE at 15.

^{22/} MCI WorldCom at 35-36.

^{23/} E.g. Ameritech at 29-30.

Commission adopt A some limiting standard, rationally related to the goals of the Act.^{1/} Iowa Utils. Bd., 119 S. Ct. at 734-735.

^{24/} Ameritech represents that the Supreme Court suggested A that an increase in cost or decrease in quality warrants unbundling only when the entrant cannot compete without access to the incumbent=s facilities.[≡] Ameritech at 30 (emphasis added). To the contrary, nowhere did the Court=s opinion A suggest[≡] that the term A impaired[≡] means A cannot compete.[≡] At issue in the Court=s opinion was whether a firm was A impaired[≡] if it A receives a handsome profit but is denied an even handsomer one.[≡] Iowa Utils. Bd., 119 S. Ct. at 735 & n.11.

The ILECs assert that the essential facilities doctrine is the only way to encourage facilities-based competition^{1/} and that any other interpretation of section 251(d)(2) would impose greater costs than benefits.^{1/} However, as MCI WorldCom explained in its initial Comments, there is no reason to believe that application of the essential facilities doctrine will encourage more facilities-build outs than some other limiting standard.^{1/} Both CLECs and ILECs will invest more, not less, with less restrictive unbundling requirements, and CLECs will retain strong incentives to minimize use of ILEC elements.^{1/}

For the foregoing reasons, and for the reasons stated in MCI WorldCom's initial comments, the Commission should not rely on the essential facilities doctrine to interpret section 251(d)(2).

B. NECESSARY AND PROPRIETARY

As MCI WorldCom explained in its opening comments, the necessary component of § 251(d)(2)'s unbundling requirements applies only to network elements that are proprietary in nature. See MCI WorldCom at 20. The Commission's definition of the term proprietary in the Local Competition Order was appropriately narrow, and the ILECs have not for the most part suggested in the numerous section 252 district court cases across the country that any of the network elements on the Commission's initial unbundling list are proprietary. Nor has any ILEC

^{25/} E.g. GTE at 16-20; Kahn Aff. & 6 (attachment to Bell Atlantic).

^{26/} E.g. Ameritech at 28; U S West at 6-7.

^{27/} MCI WorldCom at 26-27, 34-35; Kwoka Initial Decl. && 24-25. Indeed, the essential facilities standard would create additional barriers to entry and thus further impede competition. See Kwoka Reply Decl. && 21-38, Tab 10.

^{28/} Kwoka Initial Decl. & 25.

ever challenged the Commission's *Proprietary* definition before either the Eighth Circuit or the Supreme Court. *Id.* at 21.

The Commission need not revisit the proprietary issue where no controversy has previously existed, and it should therefore reject any of the ILECs' attempts to expand the coverage of § 251(d)(2)'s *Necessary* requirement. For example, contrary to the suggestion of some ILECs, *see e.g., Ameritech* at 44, the Commission should not disturb its initial determination that the *Necessary* standard is not implicated when a requesting carrier can gain access to the features or functions of a potentially proprietary element without gaining access to the proprietary information itself. *See MCI WorldCom* at 21 (citing *Local Competition Order* §§ 284, 481 n.1120, 498). Similarly, there is simply no reason to believe that the term *Proprietary* covers elements that are claimed to be proprietary to third party vendors (rather than to the ILEC). *See MCI WorldCom* at 22.

As noted in *MCI WorldCom*'s initial comments, although the *Necessary* standard required for CLEC access to proprietary elements is higher than the *Impairment* standard for non-proprietary elements, the difference is one of degree, not kind. *Id.* at 19. Neither the statutory context of the necessary standard, the purposes of the Act, nor the judicial interpretations of the term *Necessary* supports the ILECs' overly restrictive reading of that term. *Id.* at 18-20. The Commission should adopt *MCI WorldCom*'s proposed definition of the *Necessary* standard. *Id.* at 18-19.

VII. INDIVIDUAL ELEMENTS

A. Introduction

The most important public policy issue facing the Commission in this proceeding is how CLECs may access unbundled ILEC loops in a way that does not impair their ability to provide the services they seek to offer in competition with the ILECs. Even under their overly restrictive definitions of impairment, several ILECs acknowledge that CLECs should have unbundled access to the loop in most circumstances.^{1/} The ILECs, however, would effectively deny the access that they purport to concede by prohibiting CLECs access to related elements that CLECs need to use in combination with the ILEC loops in order to use these loops efficiently and cost-effectively.

The ILECs' key arguments in their attempt to minimize access to unbundled ILEC network elements that CLECs need to make effective use of unbundled loops can be easily summarized. First, the ILECs argue that each related network element must be analyzed on a stand-alone basis to determine if lack of CLEC access to that element would impair the CLEC's ability to provide local services.^{1/} Second, based on this myopic view of the impairment inquiry, the ILECs contend that lack of access to most elements will not impair CLEC's ability to compete because these elements are available on a stand-alone basis from alternative sources (both self-provisioned by CLECs and owned by third parties) either currently or at some indeterminate time in the future.^{1/} Indeed, the ILECs argue that the existence of even a single alternative to an ILEC element demonstrates lack of impairment from denial of unbundled

^{29/} See Ameritech at 6; BellSouth at 70, 74-75; SBC at 23; U S West at 38. The unreasonable limitations that some ILECs would place on access to unbundled loops are addressed below.

^{30/} See, e.g., Bell Atlantic at 16-17; U S West at 22; USTA at 44; BellSouth at 81; SBC at 9.

^{31/} See generally Huber & Leo Report.

access.^{1/} In other words, the ILECs would have the commission assume that duopoly X or more correctly, by potential duopoly, because the ILECs would not require that the single alternative could actually be used to provide local service -- ensures that CLECs would have the same efficient access to critical elements at cost-based rates that Section 251(c)(3) ensures.^{1/}

The ILEC=s proposed approach would deny access to elements that CLECs need to be able to compete. In particular, CLECs need an efficient means to connect their networks to unbundled ILEC loops, and the ILECs fail to consider whether elements from alternate sources practically can be connected to unbundled loops to provide local services. That a CLEC may not need access to an element on a stand-alone basis does not mean that denial of access would not impair its ability to compete where it need access to other ILEC UNEs. As explained below, the ILECs are wrong both as a matter of fact and a matter of law that no impairment will occur if CLECs are denied access to an element that they use in combination with another but to which they do not need access on a stand-alone basis.

^{32/} GTE at 8, 32-39; Bell Atlantic at 13; USTA at 29-30; U S West at 12.

^{33/} We previously rebutted the ILEC contention that CLEC access to unbundled ILEC network elements at rates set at TELRIC creates a strong disincentive for CLECs to self-provision any network elements.

Elements must connect to one another to provide service. If a provider can connect those elements efficiently, it will be able to offer local service efficiently and to be an effective competitor in the market. If a provider cannot connect those elements efficiently, then even if it has access to those elements, it is unlikely to be able to offer local service efficiently and to provide effective competition. The public switched telephone network is characterized by significant economies of connectivity.^{1/} As the ILECs own economists acknowledge, the issue is whether there is a practical alternative source to ILEC elements. Aron & Harris, Ameritech 14 (emphasis added).

The mere existence of stand-alone alternatives to some ILEC elements in some geographic areas does not mean that these alternatives are practically available to CLECs for the actual provision of local services using unbundled ILEC loops. The ILECs constructed their networks for a monopoly environment, without any concern for how to allow multiple providers to connect efficiently non-ILEC elements that potentially could be provided competitively, such as switching, to ILEC elements that remain natural monopolies, such as ILEC loops. Although, for example, CLECs may be able to provide switching in a local market, they may not be able to collocate equipment at each ILEC end office so that they can feasibly provide local service to each customer served by each end office. Or for those end offices where collocation space is available, the cost of collocation may be prohibitive and the time needed to establish collocation may substantially delay the advent of competition. Additionally, as the neutral third-party tester in New York has recently found, ILECs simply do not have the systems in place to provide loops to connect to CLEC switches even where collocations are up and running. MCI WorldCom has on

^{34/} See MCI WorldCom at 38-39.

more than one occasion sought to use its own switching in conjunction with Bell Atlantic loops but was unable to do so precisely because of the inability of the elements to be connected in a timely and reliable fashion. See Lichtenberg Decl. & 8-12, Tab 11.

The practical realities of the local marketplace therefore cause CLECs to need access to other ILEC elements so that they can effectively use unbundled ILEC loops to provide local service on a competitive basis. Loops remain a bottleneck element, and to the extent they can be efficiently provisioned only in conjunction with ILEC switching elements, then non-ILEC switches cannot provide an alternative to ILEC switches. Although the underlying scale economies associated with switching are sufficient to allow CLECs to deploy their own switches in urban areas, CLECs cannot efficiently connect their switches to unbundled ILEC loops to provide residential and small business local services. CLECs therefore need unbundled access to switching. Moreover, as MCI WorldCom explains in the UNE-specific sections below, where it cannot use its own switches, it also requires use of the ILEC=s signaling and call-related databases to complete calls, the ILEC=s shared transport to efficiently carry its traffic from the ILEC switch to the party called by its customer, and the ILEC=s DA and OS databases and services. MCI WorldCom is committed to deploying and using its own facilities wherever it is feasible to do so, but it has discovered that sometimes even where it has deployed its own facilities, they cannot practically be used to serve all customers to serve all customers because of impediments to efficiently connecting them to ILEC elements for which there are no alternatives.

Rather than dispute or even confront it, the ILECs essentially ignore this fundamental fact of CLECs. Instead, the ILECs argue that it is simply irrelevant that the additional costs, delays, and quality degradation that CLECs suffer when attempting to connect their elements to ILEC

loops impairs CLECs= ability to compete. This argument is wrong as a matter of law. Nothing in language, structure, or purpose of the market-opening provisions of the Act requires the Commission to close its eyes to the market reality and to deny unbundling of multiple elements even though the denial would impair CLECs= ability to compete using unbundled loops. To the contrary, the statutory impairment inquiry permits, and indeed requires, the Commission to consider any way or any circumstances in which denial of access would impair CLECs= ability to compete.

The ILECs should not be heard to complain that this approach allows access to a particular element in some circumstances (when CLECs seek to use the element on a stand-alone basis) but not in others (when CLECs need access in order to utilize other unbundled elements efficiently).^{1/} After all, the ILECs themselves relentlessly argue that unbundling should be required only in those specific circumstances where it would promote competition. Consideration of the interrelationship between unbundled elements that CLECs need to use in combination is also consistent with the ILEC=s own approach with respect to several UNEs. For example, ILECs agree that CLECs should get access to NIDs used in combination with leased loops, and to unbundled signaling when CLECs have the right to lease switching. U S West at 41. The same considerations should apply in addressing any element that is typically ordered in combination with other ILEC elements.^{1/} The ILEC=s proposed approach that would address whether or not a

^{35/} Of course, the fact that denial of access does not impair CLECs= ability to compete in one situation - where we use the element on a stand-alone basis - does not mean that denial of access does not cause impairment in another situation - where we use the element in combination with another.

^{36/} Indeed, the Commission could follow the same approach with respect to other elements as it used with respect to OSS when it ruled that a CLEC is entitled to the OSS associated with an

CLEC is impaired without access to an element without even considering why the CLEC wants access to the element in the first place lacks legal justification just as it defies common-sense.

Finally, the data the ILECs present concerning deployment of CLEC facilities do not demonstrate that effective alternatives to ILEC elements are available as a practical matter - even if they are considered on a stand-alone basis. While MCI WorldCom agrees with the ILECs that CLECs have aggressively deployed facilities in many areas, this deployment does not enable CLECs to use these facilities to provide prompt and ubiquitous to all classes of customers in all areas without unbundled access to ILEC elements. First, and foremost, the ILECs make no attempt to demonstrate X and in fact deliberately attempt to obfuscate X whether the facilities described in their catalogue of CLEC investments are practically available for use in the efficient provision of local service. Any existing facility is assumed to be usable to provide any service to any customer in any part of a geographic area. Moreover, every potential facility, such as cable plant, is treated as if it currently provides a true alternative, even though it may well be years before the technology supports the use and even longer before all the upgrading is performed to bring existing plant up to that capability.

element on two separate grounds - both because OSS is a network element lack of access to which would impair CLECs= ability to compete, and also because OSS is an integral part of nondiscriminatory and reasonable access to other network elements. By the same token, for example, CLECs are entitled to access to ILEC switching both because it is part of what it means to have effective access to the associated ILEC loops and also because it should be unbundled as a network element under the impairment standard.

Second, the ILECs= catalogue refers to areas Aserved \equiv by each facility, without defining what is meant by Aserving \equiv . There appears to be an implicit assumption that anytime a facility is located in a particular geographic area it can serve that entire geographic area. This is not a correct assumption for several reasons: (1) the facility may not be technically capable of serving the entire area; (2) the facility may not have the capacity to serve the entire area and it may not be financially viable to expand the capacity to do so; (3) the facility may only be able to serve the entire area if there are substantial investments in complementary elements, but those additional investments may not be justified. For example, a fiber ring that reaches into one corner of a LATA or a serving area (or even of a local exchange area) likely will not be able to serve the vast majority of customers in that area unless considerable additional investment is undertaken.

Third, the notion that only a single alternate source conclusively demonstrates that CLECs have no need for unbundled ILEC elements has no basis in market reality or economics. Duopoly is no substitute for effective competition. See Kwoka Reply Decl. && 18-20, Tab 10.

B. Loops and Loop-Related Elements

The comments reflect that lack of practical access to loops remains one of the greatest impediments to competitive provision of local telecommunications services. The ILECs concede that, except for a few large business situations, CLECs have no alternative to the ILEC loops for the provision of voice and advanced services.^{37/} But the ILECs would put restrictions on which

^{37/} BellSouth claims that access to ILEC loops to provide mass market service is not necessary because cable television and wireless alternatives are effective today, BellSouth at 72-74, but not even her Bell siblings support that claim. See, e.g., Ameritech at 6; SBC at 23; U S West at 38. There is no information available now that will allow regulators or others to predict with any confidence whether and when cable television and wireless will provide viable alternatives to the ILEC loop, and they clearly do not do so now. The Commission should make such an assessment in periodic reviews of the unbundling requirements.

components of their loops they would make available to CLECs and on where and how the CLECs could connect their own elements to those loops. These restrictions undermine the ability of the CLECs to offer competitive service. The exceptions proposed by ILECs to their provision of unbundled loops to CLECs would deny CLECs access when no alternatives exist and also would create contentious regulatory battles certain to delay, and substantially increase the cost of, CLEC entry. The comments in this proceeding reinforce that the key public policy issue is not whether CLECs should have access to unbundled ILEC loops, but how they can be assured of practical access to the loop when they are using their own switching (and other elements) to provide service.

The ILEC catalogue of CLEC elements already deployed correctly identifies a number of locations where CLECs are using their fiber rings to reach large business customers directly. See Reply Declaration of John M. Wimmer (AWimmer Reply Decl.≡) & 4 (attached hereto as Tab 13). MCI WorldCom builds out its fiber rings to connect as many of its large business customers as possible and extends its rings to add new business customers it has won. Id. But this network expansion of necessity must be on a case-by-case basis as MCI WorldCom (like other CLECs larger and smaller) does not have the financial wherewithal, nor would it be financially viable, to extend its network to the premises of all businesses and residents in a serving wire center area. Id. There may be a few exceptions, but for the vast majority of locations even if MCI WorldCom is self-provisioning loops to a few large business customers within a serving wire center area, it

would not be viable to self-provision loops for all customers (or even all business customers) it wins in that area.^{1/} Id.

^{38/} Even in uniquely dense locations building entry restrictions imposed by landlords regularly require MCI WorldCom to use ILEC loops.

The ILECs= proposed loop rules fail to take into account the market dynamics that determine where CLECs can viably self-provision loops, and therefore would deny CLECs access needed to provide local telecommunications services. Id. && 5-6. Ameritech proposes that CLECs not have access to unbundled loops in wire centers with 40,000 or more lines in which alternative loop facilities have been deployed. Ameritech at 6. In a similar vein, Bell Atlantic would deny CLECs access to high-capacity fiber loops in any area where at least one carrier has deployed its own network and collocated its own transmission equipment in Bell Atlantic=s wire centers. Bell Atlantic at 39. There are more than 1,400 ILEC serving wire centers that serve 40,000 or more lines.^{1/} More than half of those lines are residential lines. Market forces today do not allow CLECs to deploy ubiquitous networks that extend to the premises of all customers in a geographic area. Wimmer Reply Decl. & 5 (Tab 13). A CLEC may choose to build out its network to a single large business customer, but the incremental cost of extending the network to nearby customers often will far exceed the incremental revenues that would be generated, even if one or more of those additional customers sought high-capacity fiber loops.^{1/} Moreover, the fact that a single CLEC has demand sufficient to support loop deployment in a specific area does not mean that other CLECs will have such demand. Id. The inevitable result of Ameritech=s proposal were it implemented would be that CLECs would be unable to reach great numbers of customers -- especially residential customers -- whenever a CLEC decides to extend its network to a single business customer in the same wire center. See id. Allowing additional CLECs to

^{39/} HAI Model, release 5.0, Ex Parte Presentation - Proxy Cost Models, CC Docket No. 96-45, Letter from Richard N. Clarke to Magalie Roman Salas (Dec. 16, 1997) (AHAI model \equiv).

^{40/} Id. Moreover, landlords may block CLEC access at any price, thus requiring access to the ILEC loops to gain access to the building and customer.

enter the market using unbundled ILEC loops gives them the opportunity to gain market penetration and maximizes the likelihood that ultimately there will be more than two facilities-based providers.

SBC, GTE, U S West, and BellSouth=s proposals are, if anything, more extreme because they would not require any alternatives to be in place before restricting CLEC access to unbundled loops. SBC would deny CLECs access to unbundled loops serving large customers in dense wire centers with collocated CLECs. SBC at 23, 30. This is a strange basis for an exception. If a CLEC undertook this substantial investment required for collocation, switching and transport, its decision not to extend its network further, to customer premises via loops, is much more likely to demonstrate lack of justification for additional investment than a lack of commitment to self-provisioning. SBC has it backwards -- collocation suggests the need to lease loops, not the absence of need. More generally, the rule does not reflect the dictates of the market. The 1,400 dense wire centers (serving 40,000 or more lines) serve in total 94 million access lines.^{41/} Whatever SBC=s definition of large business, there surely will be many such businesses located in dense wire centers where a CLEC has collocated that nonetheless do not generate enough traffic to justify CLEC loop buildout. Under the proposed SBC rule, CLECs would be precluded from reaching those business customers. This will not only deny those customers competitive service; it also will artificially restrict CLEC access to revenues needed to continue to expand their networks.

^{41/} HAI model, 5.0.

GTE would deny CLECs access to unbundled loops used to serve business customers with 20 or more access lines or multiple dwelling unit complexes. GTE at 10. GTE provides no empirical evidence X because there is no evidence X to justify denying CLEC access to loops when a customer uses 20 loops.^{4/} The economics of local telecommunications service is far more complex than GTE=s simplistic and anticompetitive proposed rule. It is not economically feasible to build loops to thousands of businesses with 20 or more lines. Id. Wimmer Reply Decl. & 6 (Tab 13).

U S West proposes that the Commission adopt a presumption that unbundling is not required for ILEC high-capacity transmission facilities that connect to end user premises and that operate at DS1 or higher transmission levels, placing the burden on the CLEC to rebut the presumption with evidence that unique local conditions prevent deployment of high-capacity facilities to certain customers. US West 38-39 While CLECs are busily deploying their own fiber transmission facilities, there is no way they can do so to every location where a customer seeks a DS1 trunk. Wimmer Reply Decl. & 7. If ILECs had the discretion to deny CLECs access to fiber loops with DS1 capacity, they could play havoc with CLEC business plans and product launches by strategically refusing to provide DS1s in those locations the CLECs are least likely to be able to self-provision. Id.

BellSouth would not unbundle business loops (4-wire and higher) in the denser two of three zones that it proposes. BellSouth at 71-72. But there will be many situations, especially in the second zone, in which CLEC self-provision will not be feasible.

^{42/} Indeed, none of the ILECs provides any empirical evidence to justify their loop proposals.

That the ILECs cannot even agree among themselves as to how to limit access to loops suggests how arbitrary the many ILEC proposals really are. Rules based on artificial thresholds, such as serving wire centers that serve 40,000 customers, or business customers with 20 or more lines, or a single DS1 line, or a four-wire line, not correspond to need. Real-life deployment decisions are not based only on the size of the customer or of the serving wire center, but also on dynamic market factors such as customer distance from the CLEC=s rings, the availability of rights of way, the possibility and costs of gaining building entry, and myriad other factors. Wimmer Reply Decl. & 6 (Tab 13). If the FCC or any state commission tried to capture each of these factors faithfully in a rule, the rule would be so complex as to be entirely unworkable. And if any of the ILEC exceptions were adopted, CLECs would be denied access to loops when such access is needed to be able to offer competitive local service.

Focusing their energy on artificial restrictions for access to the loops, the ILECs largely ignore another critical public policy issue X how CLECs should be able to access unbundled ILEC loops. Where they do address the issue, it is to impose constraints on CLEC access, for example, by placing limits on loop conditioning, GTE at 86-87, or by limiting where CLECs can connect with ILEC loops. See e.g., SBC at 30-31 (access at remote terminals, feeder distribution interfaces, and controlled environments results should not be required). Most of all, the ILECs attempt to impose indirect constraints by proposing that the impairment analysis for each element in a UNE combination be performed on a stand-alone basis. For example, Bell Atlantic argues that the fact that it might be less expensive and more convenient for a CLEC to get a network element from the ILEC in combination with another element does not suffice to put that element on the list of UNEs that ILECs must provide CLECs; the element must meet the standard

considered in isolation, even if it is in fact already combined with another element in an ILEC network. Bell Atlantic at 17.

If a CLEC is restricted in where it can connect with the ILEC loop and in the loop conditioning it can request, it will be extremely difficult, costly, and slow for the CLEC to connect its switches to those ILEC loops. These unnecessary restrictions on the CLEC=s ability to use its own switching should not be allowed. If, on top of that, these connection issues cannot be considered when determining whether the CLEC should have access to the ILEC=s switching, then there is the additional danger of denying the CLEC access to ILEC switching. The ILECs seek blatantly anticompetitive rules.

The procompetitive approach is to require ILECs to offer on an unbundled basis elements that are needed to access other elements for which there are no practical alternatives. Just as U S West has argued that CLECs should get the NID when they lease unbundled loops, U S West at 41, and other ILECs have argued that CLECs get signaling when they lease switching, Ameritech at 114; SBC at 43, if ILEC switching is needed to gain access to ILEC loops, then unbundled switching must be available whenever a CLEC obtains unbundled loops.^{1/}

^{43/} More generally, the right to get access to element AX \cong includes the right to get access to elements needed to access element AX \cong efficiently, just as the Commission has determined that CLECs get access to OSS both as an element and as a means of accessing other elements.

In MCI WorldCom's comments, it described the various parameters that should be incorporated into Commission rules on access to unbundled loops. These all focused on the importance of incorporating flexibility and functionality into the rules so that CLECs could fully exploit the continuous technological changes reduce the diseconomies of connectivity CLECs now suffer relative to the ILECs when attempting to connect their own switching and other equipment to the ILECs' loops. For example, MCI WorldCom explained that instead of defining the one end point of the loop as a distribution frame (or its equivalent), it urges the Commission to define that end point as the loop access point, and further to explicitly identify a number of such points. See MCI WorldCom at 45-46. This approach will minimize the ability of ILECs to challenge each and every CLEC request for which connection would not be at the main distribution frame. Similarly, we explained that actual loop requests increasingly are couched in terms of loop capability, frequently measured in terms of bandwidth, and thus the rules should explicitly identify bandwidth as an appropriate parameter for CLECs to use when ordering ILEC loops. This has the simultaneous advantage of allowing CLECs to obtain the functionality they need and allowing the ILEC to provide that functionality.^{44/}

The level of detail that MCI WorldCom suggests be incorporated into the rules would provide a sufficiently clear test about which loop requests ILECs honor. In real life CLECs must make explicit requests about the capabilities of all elements they order, and identifying the parameters that can be used in ordering provides very useful guidance that should eliminate (though with ILECs' litigious nature, likely will only reduce) the need for case-by-case

^{44/} This is not a new concept. For years, the ILECs have provided DS1 functionality using cost-saving HDSL technology.

determinations of whether the ILECs can refuse to honor CLEC orders. Defining loop access points in functional terms does not inject unacceptable uncertainty because it is reasonably administrable. Even the alternative is more subject to uncertainty and delay because it would require continuing and continuous proceedings to update the rule as local networks evolve.

In providing its loop definition in the comments, MCI WorldCom explained that the loop consists of a number of components. Two of those components are the NID and intrabuilding network cable. Although most of the ILECs, in knee-jerk fashion, claim CLECs should not have unbundled access to the NID because the actual equipment is cheap and available off-the-shelf,^{45/} it is noteworthy that U S West states that it is operationally efficient to provide loop and NID together, so it would provide the NID where required to provide loop, and the NID should be included in the loop definition. U S West at 41. SBC states the NID should not be unbundled, but it would voluntarily provide it along with the loop. SBC at 33. Although the ILECs tend to be silent on intrabuilding network cable, it clearly would be even more difficult for CLECs to self-provision that loop component than to self-provision NIDs; there is no valid reason for denying CLECs access to intrabuilding network cable. As MCI WorldCom explained in its comments, there will be times when MCI WorldCom and other CLECs are able to self-provision loops from their network to the minimum point of contact at a building or campus on which a customer is located. But CLECs will need access to the intrabuilding network cable to gain access to the customer. As long as CLECs are guaranteed such access, it does not matter if the intrabuilding network cable and NID are identified as loop components or separate elements.

^{45/} See e.g., SBC at 33; U S West at 40-41; GTE at 56-57.

Two loop components define the transmission media that connect the end user to the serving wire center. Wimmer Reply Decl. & 8, n.3 (Tab 13). Today, the dominant medium is a copper loop. Id. About 70% of all customers are connected via unloaded copper pairs. Id. The remaining customers are connected with substandard loaded copper loops or with newer technologies such as digital loop carrier or other multiplex over copper or fiber facilities. Id. As forward-looking technologies are deployed, MCI WorldCom expects about half of all loops will be served wholly or in part over multiplexed copper or fiber facilities. Id. MCI WorldCom urges the Commission to declare the copper-only portion of the loop and the multiplexed facility as loop components. Any individual customer may be served via an all copper loop, a multiplexed loop, or a combination of the two.

The other fundamental loop component is the electronics, such as various multiplexing devices, that affect the capability of the loop. Id. & 8. Loop electronics include DS-1, all variations of DSL on copper, all variations of DLC, and DS-1, DS-3, OC3, on fiber. Id. The electronics may be located on the customer premises, at a remote terminal, or in the central office. Id. There are many configurations in which technical or space considerations (or ILEC recalcitrance) will preclude CLECs from placing their electronic equipment at the most efficient location along the loop, yet in which the ILECs are able to provide such electronics. Id. & 9. If CLECs are not able to access those ILEC electronics, they will be denied use of electronics needed to provide end-user service. Id. In effect, denying access to the electronics is tantamount to denying access to the loop.

Loops are just as essential X and just as much a bottleneck X for CLEC provision of advanced services as they are for voice services. The copper loop element must be capable of

supporting advanced services and must be available in all circumstances. Id. & 8. Loop electronics (such as DSLAMs at the central office-end of the copper segment plus high capacity multiplexed loop) are needed when the CLEC cannot viably add the electronics itself.

In the increasingly frequent situation in which loops are provisioned over IDLC,^{46/} the DSLAM must be located at the remote terminal where the copper loop element connects to the multiplexed loop. Id. & 10. At these remote terminals, there are allegedly significant space constraints. Id. Typically, according to the ILECs at most one or two DSLAMs can be collocated there. Id. Thus, if CLECs do not have access to the ILEC DSLAM, they will not be able to serve customers whose loops are provisioned over IDLC. Id. Requiring the ILECs to replace their multiplexed loops with copper would not only be costly and likely create delays, it also would reduce the capability of the loop. Id. Although the Commission's recent collocation order will reduce this problem in the central office, when customers are served by homerun copper loops, CLECs still can have difficulty providing DSL services using their own DSLAMs at small or overcrowded ILEC central offices that lack collocation space. Id.

^{46/} Currently 20 percent of all loops are provisioned over DLC, and that proportion is projected to increase ultimately to 50 percent of urban loops and 80 percent of rural loops. Almost all of these will be IDLC. Wimmer Reply Decl. & 10, n.4.

More than half the wire centers in the United States (10,967 out of 20,637) - - the majority in rural areas - - serve under 2,000 lines.^{47/} In these rural areas, about half the loops are provisioned over DLC (since they exceed 12,000 feet in length), and currently cannot use DSL technology. Id. & 11. Assume, optimistically, that 60 percent of the 1,000 copper-served loops in such a wire center are in households with personal computers (600) , half of which have modems (300), 25 percent of those are willing to pay for DSL (75), and a CLEC such as MCI WorldCom can expect a Awin rate≡ of 25 percent of the potential customers (19). Id. Then, in a 2,000 line wire center, MCI WorldCom can project to win 19 DSL customers, but only if it deploys both a DSLAM (including collocation costs) and transport. Id. For the other half of lines in small wire centers (those served by IDLC), the DSLAMs cannot be placed in the wire center; they must be collocated at remotes, where according to the ILECs there is unlikely to be any space for collocation and even if there were space, given the small number of customers served, the projected customers Awon≡ would be only two or three. Id. & 12. Therefore without shared DSLAMs (and shared high cap loop transport), MCI WorldCom and other CLECs would simply be shut out of rural markets. Id. Given the limited total number of customers likely to seek DSL service in rural remote terminals, the ILEC itself might not have the incentive to deploy DSLAMs unless it had other parties working as DSL marketing agents. Id. Leasing the DSLAMs to CLECs is the most likely way to expand the marketing effort needed to support DSLAMs in rural markets. Id. && 12, 23.

C. Transport

^{47/} Wimmer Reply Decl. & 11, HAI Model, Release 5.0.

In their comments, the ILECs propose restricting CLEC access to ILEC transport. While some concede that such access would reduce CLEC costs, and improve CLEC network efficiency and access to loops, they argue such cost savings and efficiency benefits are not relevant.⁴⁷ The ILEC transport exceptions should be rejected because they would improperly deny CLECs access to ILEC transport when such transport is needed by CLECs to provide local services efficiently.

Shared Transport

Ameritech claims that shared transport is not an unbundled network element within the meaning of section 251(c)(3) because it cannot be obtained without also obtaining local switching; that since switching fails to meet the Aimpair≡ test, so does shared transport. Ameritech at 94-95; see U S West 53 (arguing that shared transport cannot meet the impair test because that test must be applied to stand-alone elements, but it is impossible to use shared transport without ILEC switching). Ameritech further argues that even if local switching must be unbundled, shared transport would not meet either the necessary or the impair standards because it could not function without access to the routing tables in the ILEC switches, which are proprietary and not necessary for CLECs to compete. Ameritech at 96.

These arguments are absurd. Id. & 25. No element by itself suffices to provide local telecommunications service X not a loop, not switching, not transport. Id. Moreover, the exact

^{48/} For example, Ameritech states that the fact that competitors can reduce costs with shared transport is irrelevant (Ameritech at 97-98). Ameritech also argues that whether access to ILEC interoffice facilities would improve CLECs= ability to design efficient networks or combine their own switching functionality with unbundled loops is irrelevant. Id. at 87.

location of certain functionality in the network will change over time as new technologies are deployed that move intelligence to different elements. Id. The overriding questing is whether, without access to an element, a CLEC will be impaired in its ability to offer local service. Id. There is no practical way for CLECs to provide ubiquitous service without access to shared transport, as explained in our comments. Id. MCI WorldCom at 62-63. The ILECs have presented no analysis that undermines that conclusion. MCI WorldCom disputes Ameritech=s claim that the routing tables in the ILEC switches are proprietary. Id. But even if the necessary standard does apply, such access is necessary for CLECs to be able to provide ubiquitous service because in the absence of such access CLECs would be forced to face deploy a ubiquitous switching, signaling, and transport network. Id.

Ameritech=s cavalier statement that no impairment occurs because an efficient CLEC might be able to replicate the functionality provided by ILEC shared transport within two years, Ameritech at 97, demonstrates that it does not appreciate the sort of competition Congress intended to unleash through implementation of the Act. It reflects a disregard for the Act=s intent to achieve effective local competition as soon as possible and to use UNEs as an integral part of the transition from monopoly to a competitive provision services market place. Wimmer Reply Decl. & 26 (Tab 13). It is not realistic to expect that CLECs, individually or collectively, could replicate the functionality provided by ILEC shared transport for thousands of end offices within two years, and Ameritech offers no credible evidence to support its contrary claim. Id. Moreover, denying CLECs access to shared transport also places them at an artificial disadvantage with respect to ILECs when constructing their own dedicated transport facilities. Id.; See MCI WorldCom at 63.

Dedicated Transport

MCI WorldCom agrees that in limited locations alternative sources of dedicated transport are available to CLECs. Wimmer Reply Decl. & 27. As we stated in our comments, we can reach approximately 1,600 end offices using non-ILEC transport. MCI WorldCom at 64; Wimmer Reply Decl. & 27. But no such alternatives exist for more than 10 times that many end offices, and even at those for which an alternative exists, the alternative cannot always fully meet our needs. Wimmer Reply Decl. & 27 (Tab 13). The ILECs have proposed various exceptions that are intended to identify where transport alternatives exist and where they therefore would not be required to provide dedicated transport at TELRIC rates.^{49/} The problem is that these exceptions do not fully reflect market realities, and therefore the ILEC proposals would leave

^{49/} These exceptions include the following: Ameritech would deny access (1) in any wire center serving 40,000 or more lines with existing collocation, or (2) in any central office with collocation if competitive interoffice transmission facilities have actually been deployed to the wire center. Ameritech at 6, 88. Bell Atlantic would deny access of interoffice transport facilities anywhere at least one carrier has deployed its own network and collocated its own transmission equipment in the ILEC's wire center. Bell Atlantic at 31. BellSouth would deny access in Zones 1 or 2 (urban and suburban areas). BellSouth at 53. U S West would establish the presumption that interoffice transmission unbundling is not mandatory in wire centers that have more than 40,000 loops and at least one collocated CLEC. U S West at 51. GTE would deny access in wire centers that exceed 15,000 lines. GTE at 62-63. SBC would deny access in wire centers serving more than 40,000 loops where one or more CLEC have collocated. SBC at 49-50.

CLECs without access to ILEC dedicated transport in some situations in which they do not have practical alternatives. This would be especially difficult for CLECs who planned market launches and then found themselves without the capability of transporting traffic in a portion of the launch area.

These varying ILEC proposals demonstrate the difficulty in setting a threshold, especially because actual CLEC deployment decisions will be based on many factors in addition to the size of the serving wire center, (e.g., the physical distribution of each CLEC=s network facilities and demand and access to rights of way). Wimmer Reply Decl. & 32. It is noteworthy that SBC admits in its comments that it is not clear where to draw the line. SBC at 49; Wimmer Reply Decl. & 32. The fact is, if the line is drawn too stringently, competition will be harmed because some CLECs who do not have access to practical alternatives to dedicated ILEC transport will be impaired in their ability to provide service. Wimmer Reply Decl. & 32. By contrast, the benefits of a uniform, administrable rule far exceed any conceivable costs. In particular, ILECs facing effective competition from alternative transport providers will be only too willing to provide transport on a common carrier basis to any customer at TELRIC rates. To understand why this is so, one need only consider all the Acompetitive services≡ proceedings that have been held in state commissions around the country over the past decade or more at the instigation of the ILECs. Id. In these proceedings, the ILECs have alleged that one or more of their services have been threatened by competition (for example, that Centrex faced competition from PBXs), and that they therefore needed flexibility to set rates as low as long run incremental cost or marginal cost (i.e., rates are substantially lower than TELRIC), in order to be maintain customers and avoid Astranded investment.≡ It is only where the ILEC believes that there is no competition capable of

driving rates down that the ILEC will oppose having to offer dedicated transport at TELRIC rates.^{1/}

As a result, it is far better public policy and far more consistent with the intent of the Act to place no artificial restrictions on CLEC access to unbundled dedicated transport.

D. Switching

In their comments, the ILECs present a veritable catalogue of non-ILEC switches in the United States. See UNE Fact Report at Pt. I. The ILECs claim that the existence of these switches demonstrates that there are alternative sources of switching available to CLECs, and therefore CLECs would not be impaired in their ability to offer local telecommunications services if they did not have access to ILEC switching. While the ILEC catalogue of switches demonstrates that CLECs seek to invest in their networks, it does not address the central question X are alternative sources of switching functionality practically available that can be efficiently connected to unbundled ILEC loops to allow CLECs to competitively offer local telecommunications services?

^{50/} Wimmer Reply Decl. & 32. In this vein, it is ludicrous for GTE to argue that transport is available to CLECs out of the access tariff and even though that tariff far exceeds costs CLECs would not be impaired in their ability to provide service if they had to pay that rate. First, the objective of the Act is to foster competition that will drive down rates. If new entrants must pay inflated rates for a key input, that will create an artificially high ceiling below which end-user rates will not be able to fall, thus defeating the Act=s objective. See MCI WorldCom 65 n.43.

Since CLECs will need to use unbundled ILEC loops to reach the vast majority of their customers for the foreseeable future, alternate sources of switching are of use only if ILEC loops can be efficiently provisioned and connected to them. Wimmer Reply Decl. & 14. The existence of stand-alone switches is meaningless if they cannot be practically connected to ILEC loops. Id. The two relevant issues relating to practical reality are: Are the costs associated with using the switch in the range that allows the CLEC to compete against the ILEC in the local service market and can the switch reliably be used in conjunction with ILEC loops to commercially offer local service?

As a threshold matter, self-provisioning switching on a stand-alone basis while possible in theory is limited by real constraints. Id. & 15. First, there are the physical space limitations. Providing competitive switching requires CLECs to collocate transmission equipment at the ILEC central office. As the FCC has recognized, ILECs often claim that they have run out of space in their central offices to collocate CLEC equipment.^{51/} Whether or not such claims are true today, it will be inevitably true that collocation space will eventually become scarce. The ILECs concede that the ability of CLECs to self-provision switching is limited to the number of collocations that ILECs allow in their central offices. See e.g., SBC at 41. This will place a physical limitation on the number of competitors in local switching.

Although the Commission's recent collocation order partially addresses this problem, it cannot be totally eliminated. See Wimmer Reply Decl. & 16. Many ILECs summarily deny

^{51/} First Report and Order, In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-14, & 29 (Mar. 31, 1999).

access to collocation space based on their claims that collocation spaces in their facilities have reached capacity. If this assertion is contested by the CLEC, resolving disputes over collocation space availability take time and additional costs; in some cases, disputes have to be arbitrated by state commissions. Id. Even under the Commission's collocation rules, which expedite the resolution of collocation disputes, it still may take several months to have a final decision. In MCI WorldCom's experience, it takes between six months to a year from the date of a collocation request until the time a collocation is delivered, depending on the length and extent of collocation disputes. See also Herold/Stockhausen/Lathrop Decl. & 5 (attached at Tab 5 to MCI WorldCom Comments).

A CLEC that is required to self-provision its own switching may be effectively barred from doing so because of the lack of available collocation space. See Wimmer Reply Decl. & 17. In these situations, CLECs have no alternative except to have unbundled access to the ILECs' switches.

In addition to the physical limitations on offering competitive switching, there are substantial cost issues that impair the ability of CLECs to obtain switching from alternative sources. Id. & 18. Even where collocation is available, CLECs will have to bear additional recurring and nonrecurring costs which the ILECs will not have to bear. These costs associated with collocation and other activities must be undertaken because the public switched network was not configured to handle interconnection by other carriers. Id. Those additional costs can result in it not being profitable for a CLEC to offer local services to customers using its own switch. For example, self-provisioning of switching requires CLECs to install equipment and incur other costs that ILECs do not have to incur to provide switching. Id. Under current Commission

collocation rules, CLECs are prohibited from using collocation solely to install a switch in the ILEC central office. This means that CLECs have to install equipment at the collocation to transport its customer traffic to its switch at another location. This usually requires the collocation of a remote switching module, a digital loop carrier, or other transmission equipment at the ILEC central office. In addition, CLECs have to self-provide the transport back to its switch. These are all additional costs which ILECs do not have to incur to provide switching. Id. Again, in these cases CLECs will need access to ILEC switching to be able to offer local service unimpaired.

In rural areas and in some suburban areas, the cost disadvantages that CLECs face for collocation and nonrecurring charges, in addition to lost economies of scale relative to those the ILECs enjoy as dominant providers with very high market penetration, entirely rule out CLEC self-provisioning of switches. Wimmer Reply Decl. & 19.

In addition to the physical collocation and cost limitations on self-provisioned switching, CLECs like MCI WorldCom must also address whether the provisioning of ILEC loops with CLEC switches can be done reliably enough to support a commercial launch of service. In order to serve the mass (residential and small business) markets, a CLEC must be able to respond quickly and reliably to demand created by its marketing campaign. To do this, it must be able to shift thousands of customers each day from the ILEC service to its service. Experience has proven, however, that ILECs are not able to provision loops in a sufficient number and manner when CLECs self-provision their own switches. ILECs can only do so if CLECs use the ILEC=s entire UNE platform. Id. & 20.

The ILECs' inability to provision unbundled loops when CLECs use their own switches has been documented by the third-party testing currently being performed in New York State by KPMG, under the auspices of the New York Public Service Commission. As described more fully in the declaration of Sherry Lichtenberg (Lichtenberg Decl. §§ 12-13, Tab 11), the KPMG report documents myriad deficiencies in timing, quality, and reliability associated with hot cuts, manual processes, and coordination when an unbundled ILEC loop is being provisioned for use with a CLEC switch. Wimmer Reply Decl. § 21. These same problems were absent when the ILEC loop is provisioned in conjunction with the ILEC own switch. Id. Therefore, MCI WorldCom has reached the business decision that the only way for it to be able to provide its customers reliable, high quality service in a timely fashion is to lease from the ILEC both the switching and the loops. Id.

While some ILECs argue that switching should not be unbundled nationwide, see, e.g., USTA at 34, others argue that regional rules or office-by-office determinations should be made. Beyond the fact that such regional or office-by-office determinations would be administratively unwieldy and enormously expensive for a nationwide CLEC, such rules would have the effect of cutting off millions of customers from having access to competitive providers. For example, one of the proposed ILEC exceptions is that a single collocation in a central office would excuse an ILEC from unbundling the switching functionality of that office. However, a single collocation in a central office is a poor indicator of whether switching is competitive at that central office. A CLEC may be collocated at a central office in order to provide data services from that location. A collocated CLEC may have a business strategy which excludes residential customers. By the ILEC proposal, the existence of the single collocated CLEC would place all other CLECs at the

mercy of the business strategy of that particular CLEC at that location. If the single collocated CLEC, for whatever business reason, did not offer switched voice and data services, the ILEC would have effectively no competition at that central office.

E. Signaling and Call-related Databases

As MCI WorldCom explained in its opening comments, MCI WorldCom at 58-62, CLECs= ability to compete effectively in local telecommunications markets would be impaired unless if they have unbundled access to the ILECs= signaling networks and call-related databases, including the Advanced Intelligent Network (AIN≡) architecture and service management systems. Ku Reply Decl. & 2 (attached hereto as Tab 14).

The need for unbundled access to an ILEC=s signaling network and databases, including the ILEC=s AIN triggers, is most pressing where a CLEC utilizes the ILEC=s switch. Id. & 3. An ILEC=s switching element works in tandem with the ILEC=s signaling network and databases. Id. Thus, as most of the ILECs conceded in their initial comments, see e.g., Ameritech at 114; SBC at 43, unbundled ILEC switching is simply inoperable without access to the ILEC=s corresponding signaling networks and databases. Id. It is impossible for CLECs to use their own signaling in connection with the ILEC=s switching element, because the ILEC=s switches cannot interoperate with multiple signaling networks except through their own signaling networks= mediation. Ku Reply Decl. & 3 (Tab 14). It is virtually indisputable, then, that ILECs must unbundle their signaling and call-related databases where the ILECs unbundle switching.

Even where CLECs provide their own switches, it is imperative that ILECs unbundle their SS7 signaling networks and call-related databases. Id. & 4. At present, ILECs have the benefit of ubiquitous signaling networks throughout their regions. If a CLEC wishes to offer ubiquitous,

high-quality local service, it must, as a practical matter, tap into the ILECs= signaling networks and databases. Id. & 4. Notwithstanding the ILECs= assertions, third-party signaling networks are wholly inadequate substitutes for the ILECs= networks. Id. & 5. No third party vendor owns a signaling network in every Local Access Transport Area (ALATA≡), nor do they provide direct connectivity with the ILECs= switches. Id. Consequently, if a CLEC is forced to obtain signaling from a third party -- rather than from the ILEC -- the CLEC will suffer diminished performance because the third party will have to reroute the traffic to a distant Signal Transfer Point (ASTP≡), rather than using the ILEC=s nearby STP. Id. This might generate, for example, longer call set-up time for the CLEC=s customers, thereby impairing the CLEC=s ability to compete effectively. Id. Because, at this time, third party vendors only have geographically dispersed (i.e., not local) STPs typically used by smaller long distance networks, they cannot provide CLECs with signaling comparable to those of the ILECs. Id.

Likewise, it is not competitively viable for CLECs to self-provision call-related databases or to obtain them from third party vendors, even where the CLEC uses its own switch. Id. & 6. Some of the information contained in the ILEC databases to which CLECs need access simply is not independently replicable by a CLEC or third party vendor. Id. The ILECs= Toll Free Number Database, for example, contains joint and common information about terminating customers in a given local switched environment, although it is the originating customers that dial numbers which must be translated in toll free (800 and 888) calls. Id. The CLECs therefore, cannot perform the number translations without obtaining the required translation information for the 800/888 customers of every other carrier. Id. Without access to the ILEC=s Toll Free Number Database, then, a CLEC=s or third party=s Toll Free Database will be useless. Id.

Similarly, the ILECs' Line Information Database (ALIDB) contains line and billing information for all lines belonging to a group of LECs, and so a CLEC or third party vendor cannot develop its own LIDB without access to the ILECs' LIDB. Id. Furthermore, if a self-provided or third party database comprises information that is controlled and updated by the ILEC, the database will be more difficult and more costly to maintain. If the updates are not performed in a timely manner, the CLEC's call-related database will be more prone to error in the completion of certain services (e.g., Caller ID). Id. & 6.

In addition to signaling and database, CLEC access to ILECs' Service Management Systems (ASMS) is crucial to competitive entry, even for those CLECs that do not use the ILECs' switches. Id. & 7. Without access to an ILECs' SMS, a CLEC could not populate, modify, and update information in call-related databases. Id. Similarly, CLECs must have access to the ILECs' Service Creation Environment (ASCE), which is necessary to test new and innovative AIN services. Competitive entry by the CLECs will be impossible without unbundled access to the ILECs' AIN platform and software. Id. The CLECs should have access to all of the ILECs' AIN capabilities, including the AIN databases, SCE, and SMS, to be able to bring competitive new services into the marketplace and to maintain seamless routing and completion of traffic. Id. & 7.

Contrary to the ILECs' claims, the AIN architecture is not proprietary and has always been meant to open the network interface. In fact, AIN was developed and standardized to give carriers the capability to open and customize new services quickly and to provide seamless interconnectivity between networks. Id. & 8. In any event, even if an ILECs' customized AIN

services are deemed to be proprietary, see, e.g., Ameritech at 127; BellSouth at 80, the AIN deployment -- that is, the exchange of trigger and database information required to process an AIN call -- should never be considered proprietary. Id. The AIN architecture was standardized by the International Telecommunications Union (ITU) and modified by the American National Standards Institute (ANSI) precisely to facilitate the development and provision of new and innovative telecommunications services. Without access to the ILECs' AIN systems and databases, CLECs would be unable to gain access to crucial information that cannot be duplicated outside the ILECs' AIN architecture. Ku Reply Decl. & 8.

Ameritech has suggested that, because CLECs have not sought access to its AIN platform and services, these elements are not critical to entry. Ameritech at 126. However, it is the ILECs' dilatory tactics -- and not the alleged unimportance of the AIN architecture -- that have prevented the CLECs from moving forward in these areas. The ILECs have employed numerous tools -- appeals of arbitrations, refusal to do combining of unbundled elements normally combined within their networks, poor or non-existent interfaces into their OSS, and more -- to make it difficult for CLECs to utilize unbundled switching. Id. & 9. As a result, MCI WorldCom is currently using unbundled switch ports as an entry vehicle in only one state: New York and even this took some time to obtain. Id. Because the CLECs' use of unbundled switching has to date focused on such mundane matters as keeping customers from losing dial tone and assuring that features ordered are provisioned on the customers' lines, CLECs have not yet begun to explore the more advanced capabilities of switching that would be possible, at least theoretically, via the use of SS7 signaling and call-related databases. Id. Were CLECs permitted to make full,

effective use of unbundled switching, they surely would need access to these advanced capabilities to compete in the local markets.

As previously demonstrated, MCI WorldCom at 61-62, the Commission should reinstate the unbundling obligations for signaling and call-related databases imposed on ILECs in the Local Competition Order.^{1/} Local Competition Order && 452-500.

F. Operator Services and Directory Assistance

^{52/} In addition, as MCI WorldCom noted, the Commission should add the Customer Name Database and related databases to the list of databases to which CLECs should have access. MCI WorldCom at 61-62.

The ILECs' comments on operator services (AOS) and directory assistance (ADA) demonstrate that there is one point of common ground among the parties -- that MCI WorldCom would like to provide operator services and directory assistance services in the local market using its own facilities and platforms. See, e.g., Bell Atlantic at 33; Declaration of Stuart H. Miller (AMiller Decl.) (attached as Tab 8 to MCI WorldCom's opening comments) & 4. There is also general agreement that CLECs can self-provide directory assistance and operator services, but only if they can obtain all the necessary inputs at prices and a level of quality that afford a CLEC a meaningful opportunity to compete.^{1/} The problem is that CLECs do not have a meaningful opportunity to compete, and therefore remain reliant on ILEC OS/DA services, because CLECs have largely been denied access to these inputs on competitive terms. Specifically, even the most efficient CLEC cannot compete on equal terms unless it can obtain accurate and complete directory assistance listings in bulk format^{1/} from the ILECs. Moreover, as long as CLECs remain dependent on ILEC switching, an efficient CLEC has no opportunity to compete using its own

^{53/} See generally SBC at 64, Bell Atlantic at 35.

^{54/} CLECs do not have a meaningful opportunity to compete if they are limited to Adip by dip access, as opposed to bulk format. Without access to bulk listings, CLECs would be forced to (1) spend tens of millions of dollars to develop or purchase DA systems compatible with different ILEC systems; (2) keep up with each systems change made by each ILEC (allowing ILECs to raise CLECs' costs at will); (3) share competitive information with ILECs; and (4) forego the ability to offer an innovative, differentiated product. Miller Decl. && 7-8.

OS/DA platforms because ILECs will not provide customized routing of OS/DA calls to CLEC platforms using the protocol used by the CLECs. See Miller Decl. §§ 14-17 (Tab 8 to MCI WorldCom=s opening comments).

Thus, the flaw in the ILECs= position is that they assume a CLEC is not impaired if it can obtain inputs for OS/DA from alternative suppliers regardless of the quality of those inputs and regardless of the ILECs= use of their market power to substantially raise the cost of CLEC self-provisioning. MCI WorldCom demonstrated in detail why directory listings from the wholesalers cited in the ILECs= comments^{1/} do not match the accuracy of the ILECs= listings, and why an efficient CLEC effectively cannot compete without bulk access to those listings. See Miller Decl. §§ 10-13. MCI WorldCom is unaware of any ILEC that disputes the fact that ILEC listings are far more accurate than databases available from third parties,^{1/} as substantiated by MCI WorldCom=s studies and usage of the third parties= products. Miller Decl. §§ 10-13.^{1/} If, as all parties agree, MCI WorldCom has a strong desire to self-provision local DA services, and alternative listings are available on the open market, why would MCI WorldCom decline to use them for local DA services? The answer is simple, as Mr. Miller explained: the alternative

^{55/} See, e.g., Bell Atlantic at 34; GTE at 50; BellSouth at 78-79.

^{56/} Some ILECs claim that some wholesale providers update their listings on a daily basis. In addition to the fact that MCI WorldCom has discovered otherwise when actually attempting to use these products, Miller Decl. & 10, it is important to note that the ILECs do not even contend that wholesalers obtain updated data from the ILECs on a daily basis. Updates, however frequent, are only as good as their source.

^{57/} In addition to the problem that third-party databases contain inaccuracies, CLECs are further impaired where independents refuse to share their listings, or charge exorbitant rates to CLECs for listings they provide at no charge to ILECs. And alternative sources do not provide the same protection for unlisted numbers as do the ILECs databases. Miller Decl. §§ 12-13.

sources do not, and cannot possibly, match the accuracy of the ILEC listings for a local DA product. Miller Decl. & 13.^{1/}

^{58/} The ILECs point to MCI WorldCom=s national DA product, and the availability of listings from wholesalers such as Teltrust, as supposed proof that CLECs can self-provide local DA services. See, e.g., Ameritech at 108; BellSouth at 78; SBC at 60. But the only reason MCI WorldCom has been able to launch a competitive national DA product is that it has at times succeeded in forcing ILECs to share their listings. MCI WorldCom=s national DA product uses third-party sources such as Teltrust to supplement listings obtained directly from ILECs.

Even in the selected states where ILECs have been ordered to provide bulk access to their listings at cost-based rates,^{59/} MCI WorldCom cannot self-provide OS/DA unless it also uses its own switches. This occurs because where MCI WorldCom uses ILEC switching, customized routing is necessary to send CLECs= customers= traffic from the ILEC switches to MCI WorldCom=s OS/DA platforms. Some ILECs claim to offer customized routing to bring OS/DA traffic to CLEC platforms, but they neglect to mention that they use a protocol the CLEC platforms cannot handle. Id. & 16. The ILECs= refusal to use the Feature Group D protocol -- which they already use for other purposes -- to route OS/DA traffic to CLECs prevents CLECs from self-providing these services. Id. && 16-17. CLECs would have to incur substantial expenditures to convert OS/DA platforms to interface with the protocol used by the ILECs, precluding them from offering a competitive product. Id. & 16. For this reason as well, CLECs are impaired unless ILECs are required to provide OS/DA services as unbundled elements.

G. Operations Support Systems

The ILECs generally concede that operations support systems (AOSS≡) must be unbundled on a reasonable, nondiscriminatory basis if CLECs are to offer competitive service using unbundled network elements or resale. Reply Declaration of John Sivori (ASivori Reply Decl.≡) & 4 (attached hereto as Tab 15.) Two of the BOCs, Ameritech and Bell Atlantic, do not address OSS in their comments at all, and the three remaining BOCs expressly acknowledge

^{59/} SBC disingenuously argues that access to its OS/DA services is unnecessary because the Commission requires ILECs to share directory listings. SBC at 61-62. But SBC has been an industry leader in steadfastly resisting providing bulk access to its DA listings as an unbundled element subject to the pricing requirements of section 251, both in negotiations and in protracted litigation. SBC was ordered to provide such access in Texas, over its appeal, but continues to refuse to provide bulk access to DA listings as an unbundled element in other states in its region.

CLECs= need for nondiscriminatory access to OSS. See BellSouth at 31; SBC at 56; U S West at 41. MCI WorldCom urges the Commission to hold the ILECs to this acknowledgment by adopting rules that ensure not merely access to OSS, but access that is truly nondiscriminatory. To do so, the Commission=s rules should require that OSS interfaces be uniform nationwide, that all OSS be subjected to comprehensive testing, and that all ILECs implement adequate change management controls. These requirements are set forth in more detail in the Reply Declaration of John Sivori.

The three BOCs that concede that OSS must be unbundled propose a single qualification: that the OSS unbundling obligation should extend only to OSS that supports network elements that are themselves required to be unbundled (or services that must be provided for resale). See BellSouth at 31; SBC at 56; U S West at 41. This qualification adds nothing: CLECs will not request OSS they do not need. But the ILECs would improperly use this qualification to refuse access to critical OSS related to elements that CLEC=s self-provide or obtain from third parties, and it therefore should be rejected. See Sivori Reply Decl. && 2-3. To avoid impairment, of CLECs= ability to offer innovative services using elements that they self-provide or that are provided by third parties, the Commission=s rules should require ILECs to provide nondiscriminatory access to all OSS that is needed for the CLEC to make full and effective use of unbundled network elements.

CONCLUSION

For the reasons described above, MCI WorldCom respectfully requests that the Commission adopt the tentative conclusions endorsed by MCI WorldCom and further supplement its rules by adopting the additional requirements we request.

Respectfully submitted,

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